



AOGD BULLETIN



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Dedicated Issue:
Contraceptive Update

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Contents

| | |
|--|----|
| Family Planning: Country and State Scenario | 8 |
| <i>Jyoti Sachdeva</i> | |
| Counseling in Contraception: Women's Perspective | 10 |
| <i>Sunita Singal, Jyotsna Suri</i> | |
| Recent Advances in Hormonal Contraception | 14 |
| <i>Rita Bansiwali, Meera Jindal, Rekha Bharti</i> | |
| Contraception in Medically Challenging Situations (1): Liver Disorders, Diabetes Mellitus and Chronic Kidney Diseases | 18 |
| <i>Bhanu Priya, Kiran Guleria</i> | |
| Contraception in Medically Challenging Situations (2): Cardio-Vascular Disorders | 21 |
| <i>Manisha Sharma, Shweta Mishra</i> | |
| Contraception in Medically Challenging Situations (3): Options for Women at risk of or with STIs, HIV and AIDS | 25 |
| <i>Rekha Bharti, Pratima Mittal</i> | |
| Challenges in Implementation of PPIUCD Programme | 26 |
| <i>Monika Gupta, Rupali Dewan, Pratima Mittal</i> | |
| Meet the Luminary | 30 |
| Events Held | 32 |
| Missing IUCD Strings - "A Dilemma" | 39 |
| <i>Archana Mishra, Sarita Singh, Akanksha Mangla, Pragati Dwivedi</i> | |
| DMPA Returns!! | 41 |
| <i>Shashi Prateek, Esha Khanuja</i> | |
| Standards and Quality Assurance in Sterilization Services- 2014 (1) | 45 |
| <i>Sunita Singal, Pratima Mittal</i> | |
| Standards and Quality Assurance in Sterilization Services- 2014 (2) | 48 |
| <i>Rajesh Kumari Azad</i> | |
| Contraceptive Choices in Reproductive Extremes | 49 |
| <i>Rupali Dewan, Anita Kumar, Monika Gupta</i> | |
| Medical Eligibility Criteria for Contraceptive Use (WHO, 2015) | 53 |
| <i>Compiled by Jyotsna Suri, Rekha Bharti</i> | |
| Ulipristal: New Emergency Contraceptive | 55 |
| <i>Sujata Das</i> | |
| Journal Scan | 56 |
| <i>Sunita Malik, Deepika</i> | |
| Proceedings of Monthly AOGD Clinical Meeting | 57 |
| <i>Monika Gupta</i> | |
| Brain Teasers | 58 |
| <i>Monika Gupta</i> | |

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Message from the President



Dear AOGD friends,

The overall health of any woman is entwined with her Reproductive Health. The responsibilities of a gynaecologist at one end involves helping infertile couples to conceive and on the other end to provide effective contraception to those needing it. India was the first country in the world to launch the Family Planning Programme in 1952. After a turbulent course the programme has finally evolved to its present form wherein, it has been repositioned to promote reproductive health and reduce maternal and infant morbidity and mortality along with stabilization of the population. A significant drop in TFR, which stands at 2.4 for the nation and 1.8 for Delhi, reflects that things are moving in the right direction.

The size of one's family should ideally be an informed decision of the couple alone. It is very exhilarating as a woman, to be empowered to do so on one's own and not be dependent on her partner for the same. I quote Hillary Clinton here *"You cannot have maternal health without reproductive health. And reproductive health includes contraception and family planning and access to legal abortion."*

Let us all pledge on this world population day that we will do our utmost to reaffirm the human right to plan a family. May we all achieve our responsibilities with dedication and knowledge.

"No woman can call herself free who does not own and control her body. No woman can call herself free until she can choose consciously whether she will or will not be a mother" -Margaret Sanger

Dr Pratima Mittal

President, AOGD

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CONGRATULATIONS



Dr Urvashi Prasad Jha

Congratulations to Dr Urvashi Prasad Jha
for being elected as Vice President of FOGSI, 2017

AOGD is proud of you!

From the Secretary's Desk



Dear AOGD Members,

I welcome you all to yet another imperative issue and to the refreshing monsoon showers. Before I elaborate further, heartiest congratulations to Dr Urvashi Prasad Jha for being elected as Vice President FOGSI, 2017. This is a moment to cherish as, we Delhites are finally getting the well deserved accolades, with Dr Indrani Ganguly as vice president FOGSI in 2013, Dr Alka Kriplani as President Elect FOGSI 2016 and now Dr Urvashi Jha as Vice President for 2017

This issue is an ode to celebration of forth coming World Population Day. Our previous issue addressed advancements to enhance fertility and here we tread opposite, to this need of the hour, **Contraception**. Our country is struggling to improve health but with a whooping number of 1.28 billion and 51 births taking place per minute, a MMR of 190 and IMR of 41 and substantial number of under- 5 suffering from malnutrition, it is a marathon task. The key to achieve our goal for health for all is “family planning”. Through this issue we want to emphasize and reinforce this one and only methodology which has the potential to convert a developing economy into a developed one.

Last month was packed with wide ranging interesting academic sessions. Our first outreach activity of comprehensive health camp for women and adolescent girls took place. Our second outreach activity is in full swing with two camps in the pipeline to be held this month. This month various family planning activities are being planned to be carried out all over Delhi to celebrate world population day.

I hope you will enjoy reading this knowledge packed issue dedicated to contraception.

Dr Achla Batra

Hon. Secretary, AOGD
achla_batra@yahoo.com

AOGD Monthly Meeting Schedule 2015-16

| Month / Year | Institute |
|----------------------------------|----------------------------|
| 31 st July, 2015 | Holy Family |
| 21 st August, 2015 | AIIMS |
| 25 th September, 2015 | RML Hospital |
| 23 rd October, 2015 | Sir Ganga Ram Hospital |
| 27 th November, 2015 | MAMC & LNJP Hospital |
| 18 th December, 2015 | Hindu Rao Hospital |
| 29 th January, 2016 | LHMC & SSK Hospital |
| 26 th February, 2016 | UCMS & GTB Hospital |
| 25 th March, 2016 | ESI Hospital, Basaidarapur |
| 29 th April, 2016 | Apollo Hospital |

From the Editor's Pen



Dear Friends

Greetings from the Editorial Team of AOGD Bulletin! We are overwhelmed by the feedback on our second issue. The encouragement from all of you motivates us and drives us to give our best.

We have planned a special issue this time on 'Contraception', to commemorate the World Population Day which falls on 11th July. On this occasion, the Directorate of Family Welfare, Govt of NCT of Delhi has sent some important communication for all of us which has been published in the Bulletin. The government initiatives for providing quality family planning services have also been penned by the State Programme Officer, Dr Jyoti Sachdeva. This month's edition covers a range of topics which is sure to be of interest to all providers of Family Planning services. They include, how to master our counselling skills; new standards for sterilization of GOI; and review of PPIUCD, hormonal contraception and DMPA. It also discusses the contraceptive options in high risk medical situations and extremes of reproductive age. Steps to be taken when IUCD strings are missing has been practically approached. The new drug ulipristal has been reviewed. Each article has been written to provide in depth knowledge, by experts in the field and the new MEC criteria of WHO (2015) have been duly incorporated.

The luminary who kindly consented to share the highlights of her life with the AOGDians is Dr Urmil Sharma - the shining star of our association! We owe our gratitude to Dr Rupali Dewan for giving her valuable inputs and suggestions for this issue. As always, we are waiting for the feedback and active participation in the Quiz from our readers. Wish you all Happy Reading!

"The difference between the right word and the almost right word is the difference between lightening and a lightening bug" -Mark Twain

Dr Jyotsna Suri

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Family Planning: Country and State Scenario

Jyoti Sachdeva

SPO (FP), Directorate of Family Welfare, Govt. of NCT of Delhi

Introduction

India was the first country to have a Family Planning Program (FP) way back in 1952. Over the years, multiple shifts, additions, expansions, schemes and strategies have been added to reach out to the couples in need of contraceptive services and deliver quality services.

The improvement in indicators like dropping TFR and growth rate testifies the success of some recent strategies. Growth rate in India as per 2011 census has dropped from 21.54% to 17.64% and the state of Delhi has shown a drop from 47.02 to 20.96%. Besides, there is a constant drop in TFR, India having achieved 2.4 & Delhi 1.8 in year 2012.

This is the result of some recent policies and thrust on areas which had been identified as gaps or areas of scope through analysis of results of various surveys. There have been policy level and service level paradigm shifts in the program ever since. Target free approach with emphasis on voluntary adoption of family planning methods (children by choice and not by chance and FP method adoption as felt need and not by coercion), availability of emergency contraceptives, expansion of choices, emphasis on spacing and post partum family planning are some of these. However, more important indicators of FP services are now recognized to be the Contraceptive Prevalence Rate (CPR) and unmet need of contraception. Addressing these will automatically take care of the TFR.

Hence, service providers must strive to address the “Unmet need of contraception” which needs to be explored among all clients coming in contact with health services. Also as Family Planning is now being promoted as means to achieve better maternal and child health rather than just a means for population stabilization, effective health talks and other communication should encourage all clients to **express their felt need**. Finally, effective services should be able to cater to these additional demands so generated.

In this context, the MoHFW has addressed multiple issues in order to widen the service provider base, extend service provision, increase accessibility and also to enhance quality of services.

Some of these are:

a. Greater thrust on **spacing methods**.

b. **Expansion of basket** with the introduction of new device i.e. Cu IUCD 375.

c. An extensive focus on **post-partum Family Planning** so as to capitalize on the ever-increasing institutional deliveries provided by JSY. The PPIUCD services are now picking up with the nurses in the labour room being trained for counselling and insertions wherever required so that services are available round the clock.

d. For better access to services, the ASHAs are now involved in delivery of contraceptives at the doorstep besides motivating the beneficiary for health spacing between births. The scheme is called “**Home Delivery of Contraceptive at the doorsteps of beneficiaries by ASHA's**”.

e. Additional windows of services are being created by converging with other sectors and roping in additional functionaries and link workers, latest of these efforts being utilization of **AYUSH Medical officers for delivery of FP Services**.

f. Concept of **FP counsellors** to facilitate eligible couples has also contributed significantly. Though recruitment of formally trained dedicated RMNCH+A counsellors is still in pipeline, skill development of ANM's and Medical officers in counselling is underway at state and district level.

g. **World Population Day (WPD)** is observed every 11th July and the related activities commemorate the occasion for two fortnights one on either side of the day. Observation of the Mobilization fortnight also known as “Dampati Sampark Pakhwada” from 27th June to 10th July involves extensive demand generation activities through involvement of all stakeholders and health functionaries at all levels. The Population Stabilization fortnight (Service provision fortnight) also called “Jansankhya Sthirta Pakhwada” observed from 11th July to 24th July provides us with an excellent opportunity to intensify the service delivery towards the ultimate goal of population stabilization.

h. A **360 degree approach in IEC campaigns encompasses** the mass media, mid media and the interpersonal communication to achieve awareness amongst the potential service seekers and is making a significant impact.

- i. **Public Private Partnership** is another promotional intervention whereby not only sensitization of private practitioners towards common goal is brought about but effort and achievement of this important sector are amalgamated into the HMIS of respective districts and States. Under the compensation scheme, accredited private centres are entitled for Rs.1500/- for all female sterilizations done on a BPL/SC/ST woman and for every male sterilization. Coverage of private accredited centres under FPIS will strengthen this partnership.
 - j. **Family Planning Indemnity Scheme** outlines the quality issues to be addressed during sterilization service delivery and provides compensation for adverse events. This provides confidence to the acceptors. Besides, Nursing Homes and private hospitals can be accredited by the district Quality Assurance Committee, which would ensure the coverage of these institutions under compensation scheme as well as family planning indemnity scheme.
 - k. Another quality enhancement strategy is **skill development** in various FP services that are now being done with very systematic and well defined protocols. The various Manuals and technical Guidelines available for services like Male & Female Sterilization, IUCD insertion, etc. are a testimony to the commitment of the MoHFW towards quality services. Readers (FP service providers in all sectors) are advised to refer to these on www.mohfw.nic.in and follow the same in respective service provision.
 - l. Further, the **London Summit 2012** commitment of covering 120 million additional women with modern methods of contraception across the world has been desegregated and disseminated down to each district through State level dissemination workshops. Accordingly, State of Delhi should provide contraceptive of choice to 4.3 lacs additional women up to the year 2020.
 - m. The **GOI's new strategy of RMNCH+A** also envisages a continuum of care encompassing the Maternal and Child Health, Adolescent Health along with Family Planning. The concept of objectively identifying High Priority Districts (HPD's) and focusing physical and financial efforts or improvement in these districts is also likely to work out for the equitability of services under NHM. Delhi has 2 such HPD's (North East & North West) where regular and intensive well planned and programmed activities are being undertaken with help from development partners.
- It is felt and rightly so that all AOGD members can participate / contribute significantly in all the above activities and endeavours.*
- It is thus clear that if exploration of "unmet need for contraception" among all our clients becomes part and parcel of service delivery; it will not only enhance the performance of the state but help us deliver integrated services which will improve maternal and child health in the long run.*

The unwanted

*As baby suckles blissfully
 Days go in weariness n
 Then a flutter in my belly
 Is it "the unwanted"
 even as I nurse a baby
 How much I didn't want the unwanted
 Is that my destiny!
 They say it's too late to abort
 Or you risk your life
 How much I wished for an alternative
 And there you are.. a ray of hope in this turmoil
 A redeemer of womanhood
 Thank you doc*

-Dr Sarita Singh

Counseling in Contraception: Women's Perspective

Sunita Singal¹, Jyotsna Suri²

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Since the 1994 International Conference on Population and Development, women's empowerment has been recognized as important to their access to reproductive health services, including family planning. There is a relationship between women's empowerment and contraceptive use. It is generally believed that women lack in decision making power which may limit their use of modern contraceptive methods.

In many communities around the world, women continue to lack access to quality family planning services that provide the information, counseling and care necessary for them to make sound decisions about their fertility. Often at times, in settings where the quality of family planning services is substandard, contraceptive use among women tends to be low or fragmented. Rarely, high quality FP services, which recognizes their dignity and respects choice and privacy, are considered a matter of rights for women. Many providers often fail to explore her concerns, preferences and informational needs, provide inappropriate or incomplete information or an information overload. Most commonly they provide little or no preparation for side effects.

WHO, 2014, has defined quality of care within the human rights framework as *"a multifaceted element that includes but is not limited to: a full choice of quality contraceptive methods; clear and medically accurate information, including the risks and benefits of a range of methods; presence of equipped and technically competent providers; and client-provider interactions that respect informed choice, privacy, confidentiality, and client preferences and needs"*.

Women and their fertility plans

Women have different plans at different stages of their lives regarding having children. Those who do not have any children and wish to delay their first pregnancies can be thought of as delayers. Similarly, couples who have a child and want to delay their next pregnancy can be thought of as spacers, there are also clients who want to get pregnant right away.

Beliefs and attitudes in FP counseling

Each interaction between clients and health care staff

is influenced by the attitudes of both the client and the provider. Every interaction that a client has with a healthcare worker-from the time he or she enters the health care system until he or she leaves-affects the client's satisfaction with her care. How the service providers communicate their own beliefs, values, and attitudes (both verbally and nonverbally) is an important part of interactions with clients. The beliefs often are so ingrained that one may be unaware of them until a situation that challenges them is confronted. *Effective counselors are able to overcome their biases and provide services in a non judgmental manner for all types of clients.*

Sexuality, sex and power imbalance

A woman's sexual relationships play an important part along with other relevant aspects of her life when making a decision about FP. This is what is meant by a fully informed and well-considered decision. Sexual behaviors and practices affect the risk of pregnancy and of contracting STIs, including HIV, and therefore the FP method the client will choose.

Power imbalances within the client's relationship with partner might also have an effect on decision making. Unfortunately, sometimes power is used to force a woman to engage in sex when she is not willing. This is not healthy and is often penalized by laws. Sometimes people misuse their power to manipulate or sexually violate someone. *It is the provider's responsibility to be comfortable with introducing the subject of sexuality and to help clients feel comfortable about responding to questions concerning their sexual behavior.*

How power imbalances affect FP use

Many women face challenges in discussing FP concerns with their partners under the best of circumstances. These challenges become more complicated when there is power imbalance, violence or abuse in a relationship. Fewer options might be feasible for a woman who is controlled or abused by her partner. She feels greater pressure to fix what is wrong with the relationship, rather than considering her contraceptive requirements therefore might not take care of herself by practicing safer sex or FP.

Principles to be adhered to during counseling

Quality counseling is the main safeguard for the client's right to informed and voluntary decision making. The key principles for cultivating good client-provider interaction are:

- Create an atmosphere of privacy, respect, and trust.
- Engage in two-way communication with the client.
- Remain nonjudgmental about values, behaviors, and decisions that differ from your own.
- Demonstrate comfort in addressing sexual and gender issues.
- Support the client's rights to sexual and reproductive health.
- Provide reliable and factual information tailored to the needs of the client.
- Use '**Basket Approach**' and offer all contraceptive choices- barrier methods; IUCD (Cu & LNG); CHC; and progestogen only contraceptives (pills, ring and injections).

The rights of a client

- *Information-* Clients have a right to accurate, appropriate, understandable, and unambiguous information.
- *Access to services-* Services must be affordable and available at times and places that are convenient to clients, without physical or social barriers to the health care facility.
- *Informed choice-* A voluntary, well-considered decision that an individual makes on the basis of options, information, and understanding represents his or her informed choice.
- *Safety of services-* Safe services requires skilled providers, attention to infection prevention, and appropriate and effective medical practices.
- *Privacy and confidentiality-* Clients have a right to privacy and confidentiality during delivery of services.
- *Dignity, comfort, and expression of opinion-* All clients have the right to be treated with respect and consideration.
- *Continuity of care-* All clients have a right to continuity of services, supplies and follow-up.

The REDI approach to counseling

Counseling should be client-centered. The *REDI framework* provides a structure and guidance for talking with clients, so that providers do not miss important steps in the counseling process. However, too often providers

focus more on following the steps than on listening to the client and responding to what he or she is saying. The bottom line in counseling is to understand what the client needs and then help him or her meet those needs as efficiently as possible

The **REDI** framework moves away from traditional FP counseling as it emphasizes on the client's preferences; individual circumstances; sexual relationships; and knowledge and tailors the information to clients' needs. Many steps in REDI and GATHER overlap.

Rapport(R) building generally corresponds to **Greet (G)** with elements of Ask/Assess.

Exploration (E) incorporates **Ask/Assess (A)** and **Tell (T)**.

Decision (D) making includes the **Help (H)** step and also elements of Ask/Assess and Tell.

Implementing (I) the decision includes **Help, Explain (E), and Return (R)** visit.

No matter which framework is used for counseling, it is important to personalize counseling by exploring each client's individual situation, as opposed to talking generally about contraception. By personalizing the discussion and applying it to the client's specific situation, healthcare providers can help women better understand their own risk and take a voluntary informed decision. The bottom line in counseling is to understand what the client needs and then help her meet those needs as efficiently as possible.

"Remember there are two experts in the counseling room": *The provider* who has knowledge and the skills for contraception and *the client* who is also an expert with her own thoughts, feelings and opinions about her fertility plans, past experience, relationship with partner, social circumstance, sexual relationships and other unexpressed needs.

To demonstrate the REDI and the GATHER approaches for counseling, a brief case scenario follows:

Case scenario

The case scenario below is totally fictitious. Any resemblance to the person or situation having same name will be pure coincidence.

Sudha is a 27 year old married female. She has a four months old baby girl, whom she is breast feeding. She works as a maid in the locality and her husband is not employed. She has come to the health care facility for baby's immunization along with her elder daughter.

| GATHER Component | Dialogues | Phases of REDI |
|----------------------|---|--|
| Greet | <p>Provider: Sudha, Please sit down. You have a lovely daughter. What is her name?</p> <p>Sudha: Karishma.</p> <p>Provider: Lovely name. On your last visit you had complained of tiredness, are you ok now?</p> <p>Sudha: Yes I am better now.</p> <p>Provider: Good. Are you taking care of your diet the way it was explained?</p> <p>Sudha: Yes I am taking.</p> <p>Provider: How old is your elder daughter?</p> <p>Sudha: Oh she is almost three years old. I am thinking of admitting her to a neighboring Corporation school soon.</p> <p>Provider: That's very nice. Alright Sudha I want to discuss something important. It is for the sake of you and your family's better and healthier life. Are you ready to discuss now?</p> <p>Sudha: Yes, Madam.</p> <p>Provider: Sudha, let me tell you that, whatever we will discuss, will remain confidential. Some part of our discussion will be of sensitive kind. It would be better if you can openly discuss but in case you don't want to discuss, you can refuse to discuss anytime. Is it ok for you?</p> <p>Sudha: Yes I am ok.</p> <p>Provider: Thank you Sudha. Have you planned for your future pregnancies, meaning for planning your family?</p> <p>Sudha: No, I have not.</p> <p>Provider: Let me tell you that this is the right time to decide for your family because you have to take care of this baby, you are breastfeeding the baby. For doing all this you must be healthy, should have time to take care of yourself as well as baby.</p> <p>Sudha: Yes, I want my daughter to be healthy.</p> | Rapport building |
| Ask, Tell | <p>Provider: Ok Sudha, tell me, how many children do you want to have?</p> <p>Sudha: I am not sure. May be two or three.</p> <p>Provider: When do you think, you are ready for the next baby if you want one?</p> <p>Sudha: At least after 3 years.</p> <p>Provider: How do you think you can prevent a pregnancy for as long as you want?</p> <p>Sudha: I am not sure.</p> <p>Provider: Have you ever heard of family planning methods? Have you used any contraceptive method before?</p> <p>Sudha: Yes, my husband used condom but he does not like to use it.</p> <p>Provider: Ok, any other method?</p> <p>Sudha: I have heard about pills and injection but never used any.</p> <p>Provider: What about your husband, is he in favor of using any contraceptive method or not?</p> <p>Sudha: He wants me to use some but I am scared, what if anything goes wrong?</p> <p>Provider: Does he becomes angry as you are not using other method, I mean to say does he care for you or not. Do you have any problem?</p> <p>Sudha: He cares for me and the children but he is a bit irritable these days because he has lost his job.</p> <p>Provider: I am sure with your support he will be able to get a job soon.</p> <p>Sudha: Thank you madam.</p> | Exploration: Explore reproductive goals, circumstances, past experience, issues related to sexuality, method of interest to client |
| Help, Explain | <p>Provider: OK, please don't worry about any method and that they will cause you any harm. Complications of an unwanted pregnancy can be much more problematic. Let me show you different methods of contraception. You have already used condom. Do you want to know anything about condoms?</p> <p>Sudha: No, Thanks</p> <p><i>Provider shows all methods to her except about condom because Sudha doesn't want to know more about condom. Provider gives brief information about all methods like when & how to use, advantages, limitations and about the effectivity of the method.</i></p> <p>Provider: So Sudha, which method do you think is ok for planning your family or you want to know more about any method.</p> <p>Sudha: Madam, I want to know about the working of IUCD. Will it pain during insertion and how much time will it take to insert?</p> <p><i>The provider tells her about side effects and other details about IUCD to Sudha.</i></p> <p>Provider: So Sudha, are you ready for IUCD, now that you know everything about it?</p> <p>Sudha: Yes but.....</p> | Decision making: Identify if any other services, help weigh benefits, disadvantages, consequences of each option, encourage to make her own decision |

| | | |
|---------------|--|--|
| Return | <p>Provider: Tell me, what do you want to say or there is any problem? I can help if you share with me.</p> <p>Sudha: No not as such, I want to discuss about it with my husband but don't know how to tell about this to my mother-in-law.</p> <p>Provider: I can discuss with her, if you want, you can bring her along.</p> <p>Sudha: Oh thanks, that would be great.</p> <p>Provider: You discuss with your husband and if he wants to know anything, I can explain him.</p> <p>Sudha: Thanks,</p> <p>Provider: Sudha, do you want to know anything more or do you have any question?</p> <p>Sudha: No, I will come back tomorrow with my husband.</p> | <p>Implementation: Assist in making concrete specific plan, identify barriers in implementing her decision and develop strategies to overcome barriers, make a plan for follow up or referral</p> |
|---------------|--|--|

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Recent Advances in Hormonal Contraception

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Over the past 30 years, there have been significant advances in the development of new hormonal contraceptive technologies to decrease side effects and improve the effectiveness and compliance. This article outlines new delivery systems and contraceptive formulations and outlines recent advances in hormonal contraception.

Combined oral contraceptive pills (COC)

Enovid TM containing 150 mcg of mestranol and 9.85 mg of norethynodrel was the first combined hormonal contraceptive approved in 1960 by the U.S Food and Drug administration (FDA). Since then there have been constant attempts at improving the tolerability and reducing the side effects of OCPs. The estrogen in the pill was replaced by ethinyl estradiol (EE), and the dose was lowered from 150 mcg mestranol to 50 and then to 20-35 mcg EE, even 15 mcg EE formulation is now available.

The dose of progestin was also reduced and more potent progestins were developed (Table 1). Although, the 3rd generation progestins are also derivatives of testosterone, they are more selective and have less androgenic activity. A newer progestin, Drospirenone (DRSP), a derivative of spironolactone was introduced in 2001. It has anti-androgenic properties and anti-mineralocorticoid activity (unlike most other progestogens). The first DRSP containing COC to be licenced in the UK, Yasmin (ethinylestradiol 30 micrograms/drospirenone 3mg), has hyperkalemia as a potential side effect. A Cochrane Review studied the different progestogens in low dose

COCs and found fewer side effects and consequently lesser discontinuation rates with newer progestogens¹. Drospirenone was similar compared to desogestrel regarding contraceptive efficacy, cycle control and minor side effects.

The dose of estrogen and progesterone can be same throughout the cycle as in monophasic pills or vary as in multiphasic pills (Biphasic, Triphasic and Four phasic) (Table 2). The monophasic pill is to be started on D₅ of cycle for 21 days with break of 7 days. Multiphasic pills were developed with the aim of reducing the total monthly hormone intake while maintaining the efficacy. These pills have fewer side effects like amenorrhoea, breakthrough bleeding and decreased incidence of acne. The drawbacks include errors in pill taking, increased failure and difficulty in postponing menstruation if required². Biphasic pills have higher failure rates and are not available in India.



Fig 1: Triphasic pill



Fig 2: Four phasic pill

Table 1: Progestins used in COC

| Pregnanes | Estranes | Gonanes 2 nd gen | Gonanes 3 rd gen | Spironolactone Analogue |
|-----------------------|-----------------------|-----------------------------|-----------------------------|-------------------------|
| Chlormadinone acetate | Norethindrone acetate | dl-Norgestrel | Desogestrel | Drospirenone |
| Cyproterone acetate | Ethinodiol acetate | Levonorgestrel | Gestodene | |
| Nomegestrol | Lynestrenol | | Norgestimate | |
| Nestorone | Norethynodrel | | | |

Table 2: Constituents of biphasic, triphasic and four phasic pills

| Biphasic pills | Triphasic pills (Fig 1) | Four phasic Pills (Fig 2) |
|--------------------------------------|-------------------------|--|
| EE- 35 mcg is constant | EE- 30 mcg is constant | E ₂ (estradiol valerate) 3 mg & DNG 2 mg (Dienogest) for 2 days |
| Low dose progestin for first 10 days | LNG 0.05mg for 6 days | E ₂ 2 mg + DNG 2 mg for 5 Days |
| High dose progestin for next 11 days | LNG 0.075mg for 5 days | E ₂ 2 mg and DNG 3 mg for 17 days |
| | LNG 0.125mg for 10 day | E ₂ 1 mg and DNG 3 mg for 2 days |

Advantages of Qlaira, four phasic pill:

- Fewer spotting days, reduction in mean blood loss
- Reduced break through bleeding
- More increase in HDL (8%)
- Stability in carbohydrate mechanism
- Effective in heavy menstrual bleeding
- Significant increase in haemoglobin and ferritin levels.

Extended cycle regime is US FDA approved and has advantages of decreased incidence of pelvic pain, headaches, bloating /swelling and breast tenderness; improved control over symptoms of endometriosis and polycystic ovarian syndrome; and greater convenience due to fewer withdrawal bleeds per year. Only drawback of continuous use is little information on its long term safety and slightly higher cost.

Seasonale (Fig 3)

- 150 mcg LNG + 30 mcg EE
- 84 active pills and 7 non hormonal pills
- Pearl index: 0.78



Fig 3: Seasonale pill

Lybrel (Fig 4)

- 0.09 mg LNG + 20 mcg EE
- 365 days with no break



Fig 4: Lybrel pill

Progestin only pills

Progestin-only oral contraceptives (also known as mini-pills) are the best oral contraceptives for breastfeeding women, as they apparently do not reduce milk production. They also do not have any estrogenic side-effects. The POPs can also be used as emergency contraception after unprotected sex. They mainly act by thickening the

cervical mucus, suppression of ovulation and involution of endometrium with efficacy of 99.95%. Various brands containing progestins-norethindrone, levonorgestrel and norgestrel are available. They are to be taken daily without break. Newer Cerazette and Zerogen tablets containing 3rd generation 75 mcg desogesterel have a window period of 12 hours as compared to 3 hours with traditional pills adding to its effectivity. According to WHO MEC 2015, breast feeding mothers, <6 weeks postpartum can use POP (category 2)³. It was assigned category 3 by 2009 edition of WHO medical eligibility criteria.

Emergency contraceptive pills (ECPs)

A Cochrane Review, involving 48 trials with 33,110 women has stated that levonorgestrel is more effective than the Yuzpe regimen in preventing pregnancy⁴. Single dose (1.5mg) (available with the name ECee pill, I-Pill, Pill 72), administration seems to have similar effectiveness as the standard 12 hours apart, split-dose (0.75mg) of levonorgestrel, to be taken as soon as possible after unprotected coitus (within 72 hours).

In the 2015, 5th edition of WHO MEC for contraceptive use, Ulipristal acetate (UPA) has been added as a new drug for postcoital contraception. Further, obesity has been added as a new indication for use of emergency contraception without restriction (category 1). Women with severe cardiovascular diseases (ischemic heart disease, cerebrovascular attack), thromboembolic conditions, migraine, severe liver disease including jaundice and using CYP3A4 inducers can use COCs, LNG or UPA (ulipristal acetate) for emergency contraception (category 2). Women who are breast feeding can use COCs and LNG as ECP without any restriction (category 1) and UPA as category 2 ECP. There is no restriction on repeated use of ECP or its use in women with past history of ectopic pregnancy³.

Hormone releasing intrauterine device

Levonorgestrel releasing intrauterine device (LNG IUD 20, Mirena) (Fig. 5), is a T shaped device with steroid reservoir containing 52 mg of LNG polydimethylsiloxane, which controls the release rate of hormone. 20 mcg of LNG is released locally daily which maintains the serum progesterone level of 150-200 mcg. It is approved for 5 years. The failure rate of LNG IUD 20 is between 0-0.2 per hundred women years.

Benefits

- A long- term reversible method
- No daily action required
- Easy insertion and removal (no local anaesthesia required)

- Lowest dose of hormonal contraceptive with no estrogen
- Decrease in frequency and amount of menstrual flow
- Good for anaemic women



Fig 5: Mirena

Limitations

- Spotting and intermenstrual bleeding for first few months
- Insertion and removal needs trained personnel



Fig 6: Femilis Slim

Femilis slim is similar to Mirena but slimmer in size so can be used in nulliparous and lactating females (Fig.6).

Injectable hormonal contraceptives

Combined injectable contraceptive (CIC) is a monthly intramuscular injection which got U.S. FDA approval in Oct 2000. It contains a progestin and synthetic estrogen. Some of the commercially available preparations include:

Cyclofem: medroxyprogesterone acetate (DMPA) 25 mg and estradiol cypionate 5 mg; **Mesigyna:** norethisterone enanthate (*NET EN*) 50 mg and estradiol valerate 5 mg; **Lunelle:** medroxyprogesterone acetate (MPA) 25 mg plus estradiol cypionate (E_2C) 5 mg; **Deladroxate:** dihydroxy-progesterone acetophenide 150 mg and estradiol enanthate 10 mg

Progestin only injectable contraceptives are the most widely used long-acting reversible contraceptives. DMPA contains 150 mg of medroxy progesterone acetate and is effective for 3 months. *NET EN* contains 200 mg norethisterone enanthate and is effective for 2 months. Depot sub Q provera contains 104 mg of medroxy progesterone and is effective for 12-14 weeks. DMPA is approved by DCGI in India. Efficacy of all preparations is almost similar, being 0.0-0.3 per hundred women years. Return to ovulation is a little longer than COCs with median time being 10 months after last injection. The main side effect is bleeding irregularity for initial few months.

Implants

From 1999 until 2010 the only progestogen implant available in the UK was the Implanon etonogestrel (ENG) implant. Implanon has now been replaced by a bioequivalent implant known as Nexplanon. The progestogen-only implant is a single, non-biodegradable, subdermal rod, 4 cm long and 5 mm in diameter and made of ethylene vinyl acetate co-polymer licensed for up to 3 years of use. Each implant contains 68 mg ENG. The release rate decreases with time from approximately 60-70 $\mu\text{g/day}$ in week 5-6 to approximately 25-30 $\mu\text{g/day}$ at the end of the third year. The main difference between Nexplanon and Implanon is that barium sulphate has been added to Nexplanon to enable detection by X-ray. The applicator has also been modified to reduce the risk of deep insertion and to facilitate one-handed insertion. Failure rate is 0.05%. Like other implants, it also has side effect of irregular bleeding /spotting for first 3-6 months.

Transdermal delivery systems

It is available in various forms- patch, gel and sprays, but only patch is FDA approved and rest are under trial.

The transdermal combined estrogen/ progestin contraceptive (OrtheEvraTM/ EvraTM) patch was approved by FDA for use in Unites States in 2002. The patch is 20 cm² with 600 μg ethinyl estradiol (EE) and 6000 μg norelgestromin (a biologically active metabolite of norgestimate) and delivers 20mcg/day of EE + 150mcg/day of norelgestromin. It primarily works by preventing ovulation. Patch can be applied on back, upper arm, abdomen and buttocks but not the breast. First patch is to be applied on day1/day 2 of periods and second patch change on the same day of first patch worn. One patch weekly is used consequently for 3 weeks followed by a patch free week. The mean concentration of the hormones is not affected by the heat, humidity, exercise, or cold water immersion. The observed contraceptive

failure is 0.7 per 100 women years. Failure is more when body weight is >90 kgs. It is well tolerated and has the side effects profile similar to OCs.

Contraceptive vaginal ring

A combined estrogen/progestin contraceptive vaginal ring (CVR) (Nuva Ring R) was approved by FDA for use in United States in 2001. This is a flexible ring made of ethylene vinyl acetate copolymer with an outer ring diameter of 54 mm and cross sectional diameter of 4 mm. It releases estrogen (15 mcg EE) and progesterone (120 mcg etonogestrel, an active metabolite of desogestrel) per day. It is used continuously for 3 weeks followed by a ring free week for menstruation to occur. It is easily inserted or removed by user's finger. The observed contraceptive failure is 0.1-0.3 per 100 women years. *Caution: Not to keep it outside vagina for more than 3 hrs*

Under trial

Transdermal gel (Nestragel), contains a progestin Nesterone (NES), which mainly works by inhibition of ovulation. It is applied in a dose of 2.3 mg/day once for 21 days with 7 gel free days. Phase II trial has been completed and results are promising with good safety profile and efficacy.

Transdermal spray contains progestin Nestorone (NES) and is applied in a dose 2.3 mg/day once a day with 7 free days. It gets absorbed through the skin and maintains a stable serum level which allows no need for strict check on time for application. Studies showed good acceptance among women but it needs further scrutinization.

Progesterone vaginal ring is a sialistic elastomer ring of outer diameter of 58 mm in diameter and contains micronized progesterone 2g releasing 10 mg per day by diffusion. Its effectiveness is observed to be 98.5% with good safety profile. It is mainly for lactating mothers as it also strengthens LAM along with suppression of ovulation and has no effect on mother's milk. One ring is to be worn for continuously 3 months and replaced within 2 days by the new ring after 3 months. It is approved in Chile and Peru (South America). In India it is in Phase III trial. *Caution: Not to keep it outside vagina for more than 2 hrs.*

Nestorone®/Ethinyl Estradiol ring: Once a year ring

Dual-action ring (contraceptive/microbicide): It is a combined antiviral and contraceptive ring and it claims to protect against HIV infection and pregnancy.

Other hormonal contraceptives under research

- LNG butonate (5-10 mg) injection, effective for 3 months.
- Progesterone receptor modulator-CDB 2914, use as ring or IUD.
- ST-1435 single rod implant releasing nestorone 100 mcg/day.
- Immuno contraception- β Subunit of HCG linked with carrier anti-HCG.
- Antizona and antisperm vaccines
- Male contraceptives-testosterone/DMPA

Male hormonal contraception

Two delivery methods are currently under active study, male hormonal contraceptives that can be taken in pill form by mouth, similar to the existing oral contraceptive pill for women and male hormonal injections. They mainly act by suppressing GnRH from hypothalamus and gonadotropins from pituitary. Decrease in LH leads to decrease in testosterone and decrease in FSH leads to Sertoli cell dysfunction.

The various approaches are:

- Testosterone enanthate (TE) and testosterone undecanoate (TU) weekly injections.
- Testosterone + progestin- TE gel + DMPA inj; TE inj/wk + LNG oral daily; TU inj/8wk + LNG implant; TE implant + DMPA
- GnRH antagonist s/c per day + TE inj/wk
- SARM-MENT (7 α methyl 19 norgesterone) implants.

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Contraception in Medically Challenging Situations (1): Liver Disorders, Diabetes Mellitus and Chronic Kidney Diseases

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An unintended pregnancy can have serious implications in women with chronic medical conditions. Effective contraceptive counseling requires an understanding of a woman's preferences and medical history, as well as the risks, benefits, adverse effects and contraindications of each method. Some medical conditions are associated with theoretical increased health risks when certain contraceptives are used, either because the method adversely affects the condition or because the condition/its treatment affects the contraceptive efficacy. Hence, pregnancy should be preplanned in chronic medical conditions with adequate control of high risk factors to optimize the pregnancy outcome; if at all pregnancy is needed.

Barrier contraceptives and emergency contraceptives are considered universally safe and there are only few contraindications to sterilization. Hence, these three methods are acceptable choices in any woman with chronic medical conditions.

Barrier contraceptives are safe in any medical disorder with added advantage of preventing sexually transmitted disease. This method has higher failure rates and both patients and physicians should be aware of it.

Emergency contraception is a good option for isolated unprotected intercourse or failure of barrier contraception, but, *should not be used as ongoing method of contraception*. Levo-norgestrel pills can be taken within 72 hours of unprotected intercourse without any major side effects in women with high risk factors.

Sterilization should be offered to women with medical conditions who have completed their family and do not desire further child bearing. The WHO does not enumerate any contraindications to sterilization, but, does mention the conditions associated with high risk for anaesthesia and surgery and when the method should be delayed.

Categories

In 2010, the World Health Organization (WHO) published the 4th edition of the Medical Eligibility

Criteria for Contraceptive Use¹ (WHO-MEC). This document provides recommendations for the safety of various methods of contraception in women with certain health conditions. At the time of going to press, the 5th edition of the WHO-MEC criteria is awaited which is likely to be released by 1st July 2015. However the Executive Summary of the 5th edition has been released which defines the major changes in the new edition, but no change in the conditions to be discussed in this article has been elucidated.

The conditions affecting eligibility for the use of each contraceptive method are classified under one of the following four categories.

| | |
|---|---|
| 1 | A condition for which there is no restriction for the use of the contraceptive method |
| 2 | A condition where the advantages of using the method generally outweigh the theoretical or proven risks |
| 3 | A condition where the theoretical or proven risks usually outweigh the advantages of using the method |
| 4 | A condition which represents an unacceptable health risk if the contraceptive method is used |

In some cases **initiation** of a contraceptive method (I) and **continuation** of the method (C) are distinguished and classified differently.

| | |
|------------------|--|
| Initiation (I) | Starting a method of contraception by a woman with a specific medical condition |
| Continuation (C) | Continuing with the method already being used by a woman who develops a new medical condition. |

Liver disorders

Women of reproductive age with liver disease, including chronic infection with the hepatitis B or C virus, typically remain fertile and have the same contraceptive needs as other women of reproductive age without liver disease. Hormonal contraceptives, such as oral pills, subcutaneous implants, injectable, skin patches and vaginal rings, consist of an estrogen or a progestogen or a combination of both. Because these hormones may have effects on and are metabolized by the liver, certain considerations must be taken into account when

helping women with liver disease choose an appropriate contraceptive method (Table 1).

A non-hormonal method of contraception should be the first choice for women with liver disease. In those with active liver disease, severe cirrhosis & liver tumor, estrogen containing contraceptives are contraindicated. For women who had begun using combined hormonal methods before being diagnosed with acute hepatitis or a flare of hepatitis, the benefits of continuing contraception usually outweigh the risks. Those with mild compensated cirrhosis can use estrogen-containing contraceptives, but for those with severe decompensated disease it is contraindicated. Women who are carriers of hepatitis virus can use any hormonal method of contraception².

Diabetes mellitus

Women with poorly controlled DM are at increased risk of adverse pregnancy outcomes and sequel of diabetes, which influence the patient's prognosis, quality of life, and risk of pregnancy complications. Also, the presence of vascular disease affects contraceptive choices (Table 2).

Combined hormonal contraception: Low dose COCs can be used in patients with DM as they do not cause any clinically important changes in carbohydrate metabolism including HbA1c levels in type 1 DM and type 2 DM (without vascular disease) patients^{3,4}. Vaginal ring also does not cause any increase in HbA1c level and in clinical manifestations of microvascular complications⁵.

Progestin only methods: Progestin-only pills (POP) have limited effect on glycemic control and lipid profile and can be used in diabetic women with both non-vascular disease and vascular disease; however, literature on POP use in women with DM is sparse. Diabetic women using LNG/etonogesterol implant or oral treatment were found to have decreased total cholesterol and high-density lipoprotein cholesterol, but, no significant changes in insulin and HbA1c levels⁶. Limited evidence indicates that DMPA is associated with adverse changes in carbohydrate and lipid metabolism. Therefore, in diabetic women without vascular complications, the benefit of DMPA use outweighs the risks; however, in women with vascular complications, the risks of use outweigh the benefits.

Table 1: Contraceptive choices in liver diseases

| Liver tumor | CHC | POP | DMPA, NET-EN | IMPLANT | LNG-IUS | Cu-IUD |
|------------------------------------|-----|-----|--------------|---------|---------|--------|
| a) Benign | | | | | | |
| i) Focal nodular hyperplasia | 2 | 2 | 2 | 2 | 2 | 1 |
| ii) Hepatocellular adenoma† | 4 | 3 | 3 | 3 | 3 | 1 |
| b) Malignant | 4 | 3 | 3 | 3 | 3 | 1 |
| Cirrhosis | | | | | | |
| a) Mild (<i>compensated</i>) | 1 | 1 | 1 | 1 | 1 | 1 |
| b) Severe (<i>decompensated</i>) | 4 | 3 | 3 | 3 | 3 | 1 |
| Gall bladder disease | | | | | | |
| a) <i>Symptomatic</i> | | | | | | |
| i) treated by cholecystectomy | 2 | 2 | 2 | 2 | 2 | 1 |
| ii) medically treated | 3 | 2 | 2 | 2 | 2 | 1 |
| iii) current | 3 | 2 | 2 | 2 | 2 | 1 |
| b) <i>Asymptomatic</i> | 2 | 2 | 2 | 2 | 2 | 1 |
| History of cholestasis | | | | | | |
| a) Pregnancy-related | 2 | 1 | 1 | 1 | 1 | 1 |
| b) Past COC-related | 3 | 2 | 2 | 2 | 2 | 1 |

Table 2: Contraceptive choices for women with Diabetes mellitus

| Diabetes mellitus (DM) | CHC | POP | DMPA, NET-EN | IMPLANT | LNG-IUD | Cu-IUD |
|---|-----|-----|--------------|---------|---------|--------|
| H/O Gestational DM | 1 | 1 | 1 | 1 | 1 | 1 |
| Non vascular disease | 2 | 2 | 2 | 2 | 2 | 1 |
| a) non-insulin dependent | 2 | 2 | 2 | 2 | 2 | 1 |
| b) insulin dependent | | | | | | |
| Nephropathy/ retinopathy/ neuropathy | 3/4 | 2 | 3 | 2 | 2 | 1 |
| Other vascular disease or diabetes of >20 years' duration | 3/4 | 2 | 3 | 2 | 2 | 1 |

Table 3: Contraceptive choices in renal diseases

| | CHC | POP | INJECTION | IMPLANT | LNG-IUS | Cu-IUD |
|---|-----|-----|-----------|---------|-------------------------------|-------------------------------|
| Renal transplant Complicated: graft failure (acute/chronic), rejection | 4 | 2 | 2 | 2 | 3 ^{1/2} ^c | 3 ^{1/2} ^c |
| Uncomplicated | 2 | 2 | 2 | 2 | 2 | 2 |
| Kidney disease with Hypertension | | | | | | |
| Adequately controlled hypertension | 3* | 1* | 2* | 1* | 1 | 1 |
| Elevated blood pressure levels (properly taken measurements) | | | | | | |
| i) systolic 140-159 or diastolic 90-99 | 3 | 1 | 2 | 1 | 1 | 1 |
| ii) systolic ≥ 160 or diastolic ≥ 100 ‡ | 4 | 2 | 3 | 2 | 2 | 1 |
| Vascular disease | 4 | 2 | 3 | 2 | 2 | 1 |

I= initiation, C=continuation

Intrauterine devices: The Cu-IUD has been shown to be safe for use in women with well controlled DM. Limited data exist on the use of the LNG-IUD in women with DM; though it has no impact over HbA1c levels or lipid profile compared with healthy controls.

Chronic kidney disease

Women of childbearing age with kidney disease should expect proactive counseling regarding pregnancy and contraception. Discussions should include the impact of pregnancy on their kidney disease and the impact of kidney disease on maternal and fetal outcomes.

There are no specific WHO medical eligibility criteria for contraceptives in renal disease. The UK National Kidney Federation (NKF) advises that Combined hormonal oral contraceptives (COC) can be used in women with kidney diseases, but with a low dose of ethinylestradiol (EE) $<35\mu\text{g}$ ⁷. Hypertension is common in women with kidney disease and COC use can increase the blood pressure. So, the NKF also advises that BP should be monitored and the dose of antihypertensive drugs may need to be increased if necessary.

In renal transplant patients, LNG-IUS & Cu-IUD are effective and reversible methods, but, has concerns of decreased effectiveness and increased risk of infection due to chronic immunosuppression though failures are sparse. There is no data regarding the use of etonorgesterol among organ transplant recipients, but given its long safety record, its use among organ transplant patients is likely to be safe. DMPA has no known drug interactions with common agents used in the immunosuppressive regimens of transplant patients. COCs should be considered carefully if they are to be used in a patient following transplantation as they interact with cyclosporine. Expert opinion recommends that patients should achieve a period of 6 to 8 months of graft stability and that there be no other contraindications

to COCs before initiation of COC contraception. Progesterone only pills (POPs) are also a good option for patient with renal transplant as it avoids estrogen related side effects associated with CHCs, but, this also interacts with cyclosporine.

Conclusion

Contraception in medically challenging situations needs special attention and individualized approach. Women should be informed about good and bad effects of contraceptives and appropriate counseling is mandatory.

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Contraception in Medically Challenging Situations (2): Cardio- Vascular Disorders

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Reproductive health for women with cardiac disease is becoming an increasingly important issue. The advancement in the field of medicine and surgery has helped the women with congenital heart disease to live longer and reproduce. At the same time rising rate of obesity, diabetes, advanced maternal age are increasing the risk of acquired heart disease in women during reproductive age. Women with chronic heart disease (including congenital heart disease, ischemic heart disease, heart failure or pulmonary hypertension) are more likely to experience a maternal death and there is a higher risk of complications for the fetus¹. Thus risks of pregnancy in women with certain cardiac conditions are generally greater than risks associated with contraceptive use².

The purpose of this article is to provide information to the medical professionals to make sound decisions regarding the selection of appropriate contraceptive method and facilitate the use of contraceptive choices that do not exacerbate the cardiac problem.

When should sexual and reproductive health issues be raised in women with cardiovascular disease?

A proactive approach to contraceptive advice and preconception information should be started in adolescence at age 12-15 years, depending on individual maturity. This should be a standard part of transition from pediatric to adult services. The cardiologists should provide women and their general practitioner with information that may be relevant to future care³.

How to advise contraception in a cardiac patient?

While advising a contraceptive method to a woman with cardiac disease a clinician should combine the acceptability of the method with the highest efficacy and safety profile. Before prescribing, a detailed history and risk assessment is required which is similar to as required for any other healthy woman³. A recording of blood pressure, weight and body mass index should be documented. The clinician should also enquire specifically about:

- Cardiac diagnosis, cardiac operations or catheter interventions
- History of rhythm disturbance
- Functional status, for example, history of breathlessness, fatigue, edema, pre syncope/syncope
- Advice of the woman's cardiologist on use of estrogen and degree of risk associated with pregnancy

Risks associated with various contraceptive methods in cardiac patients

Considering the need of contraception for women with heart disease various work groups have been made by various countries in order to use contraceptive methods judiciously.

Natural methods

Withdrawal / Safe period

- Neither method is suitable for cardiac patients who cannot afford the health risk of an unplanned pregnancy⁴.

Barrier methods

Male sheath or condom / Female condom / the diaphragm

- Safe for all cardiac patients but the disadvantage is their user dependency, even in reliable hands
- Cardiac patients who cannot afford the health risk of an unplanned pregnancy should be cautious about significant failure rate of these methods and may need emergency contraception if they fail⁴.

Hormonal methods

WHO introduced medical eligibility criteria for use of various contraceptive methods in women with cardiovascular disease and this is given in Table No. 1 along with clarification^{5,6}. These criteria do not incorporate specific cardiac conditions. So, in order to guide clinicians in appropriate counseling and management of contraception for women with heart disease, a multidisciplinary group of cardiologists, maternal- fetal medicine obstetrician, family planning physicians and obstetric anesthesiologists convened in Britain to form a working group on contraception for women with heart disease⁷. The aim of this working

group was to adapt the WHO Medical eligibility criteria for Contraceptive Use to incorporate specific cardiovascular conditions not previously addressed⁷. Criteria for using various hormonal methods in different cardiac conditions have been described in Table 2-4 along with primary contraceptive concerns².

Intrauterine methods

A Cochrane review⁸ examining the effectiveness of prophylactic antibiotic administration, in reducing IUD related complications and discontinuation within three months of insertion, concluded that the risk of

IUD related infections is low with or without antibiotic prophylaxis. Vasovagal reactions may also occur as a result of cervical stimulation during insertion or removal of intrauterine methods (Level C). IUD should be fitted in hospital³. Criteria for using LNG - IUS and Cu - IUD in various cardiac conditions have been described in Table 2- 4 along with primary contraceptive concerns².

The conditions affecting eligibility for the use of each contraceptive method are classified under one of the four categories (for details please refer to previous article).

Table 1: Medical eligibility criteria for use of various contraceptive methods in women with cardiovascular disease by WHO^{5, 6} (the changes in MEC criteria, 2015 are highlighted in bold)

| Condition | COC | P | R | CIC | POP | D/ NE | LNG/ ETG | LNG- IUD | Cu - IUD | Clarification/ Evidence |
|---|----------|----------|----------|----------|------------|----------|-------------|-------------|-------------|---|
| Multiple risks factors for arterial cardiovascular disease (older age, smoking, diabetes, hypertension) | 3/4 | 3/4 | 3/4 | 3/4 | 2 | 3 | 2 | 2 | 1 | Clarification: When multiple major risk factors exist, risk of cardiovascular disease may increase substantially. Use of COCs, P, R or CICs may increase her risk to an unacceptable level. Some POCs may increase the risk of thrombosis but less than that with COCs. The effect of DMPA and NET-EN may persist for sometime after discontinuation. |
| Hypertension | | | | | | | | | | Clarification: It is desirable to have BP taken before initiation of contraception. |
| H/O hypertension where BP cannot be evaluated | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | Evidence: Evaluation of cause and level of hypertension is recommended for COC as there was an increased risk of acute MI and stroke. |
| Adequately controlled hypertension where BP can be evaluated | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | Clarification: Women adequately treated, controlled and monitored for HT are at reduced risk of acute MI and stroke as compared with untreated. So COCs, P, R, CICs, POCs users with this condition should be at reduced risk although there are no data |
| Elevated BP levels 140-150 / 90-99 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | Evidence: Among women with this condition, COCs user were at increased risk of stroke, acute MI, peripheral arterial disease compared with non users. Discontinuation of COCs may improve BP control. |
| ≥ 160 / 100 | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 1 | Limited evidence suggests that in women who used POPs or Injectables had a small risk of cardiovascular events compared with women who did not use |
| Vascular disease | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 1 | |
| Current And H/O Ischemic Heart Disease | 4 | 4 | 4 | 4 | I C 2 3 | 3 | I C 2 3 | I C 2 3 | 1 | |
| Stroke (H/O cerebrovascular accidents) | 4 | 4 | 4 | 4 | I C 2 3 | 3 | I C 2 3 | I C 2 3 | 1 | |
| Known dyslipidaemia without other known cardiovascular risk factors⁶ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | Clarification: Routine screening is not appropriate because of the rarity of conditions and the high cost of screening. While some types of dyslipidaemia are risk factors for vascular disease, the category should be assessed according to the type, its severity and the presence of other cardiovascular risk factors |

| | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|
| Valvular heart disease: Uncomplicated | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | Clarification: Prophylactic antibiotics to prevent endocarditis are advised for insertion |
| Complicated (pulmonary hypertension, risk of atrial fibrillation, H/O subacute bacterial endocarditis) | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | |

COC=combined oral contraceptive; P - Combined contraceptive patch; R - Combined contraceptive vaginal ring;

CIC – Combined injectable contraceptives; D/NE - Depot medroxyprogesterone acetate / Norethisterone enantate; LNG/ETG Levonorgestrel / Etonogestrel implant

POP-Progestogen-only pills; LNG-IUD - Levonorgestrel intrauterine device (20 mic g/ day); Cu-IUD Copper intrauterine device; I - Initiation; C - Continuation

Note-Recommendations for emergency contraceptive pills by WHO - Women with severe cardiovascular diseases including IHD, cerebrovascular attack or other thromboembolic conditions, can generally use COCs, LNG or ulipristalacetate for emergency contraception. (MEC category 2)⁶.

Table 2: Contraception for low pregnancy risk conditions²

| Condition | CHC | POP | Injection | Implant | LNG-IUD | Cu - IUS | Primary Contraceptive Concerns |
|--|------------------------|----------|-----------|----------|----------|----------|--------------------------------|
| Small shunts: ASD | 1/3^a | 1 | 1 | 1 | 1 | 1 | Thrombogenic |
| VSD; PDA | 1/2^a | 1 | 1 | 1 | 1 | 1 | Thrombogenic |
| Patent foramen ovale | 2/4^b | 1 | 1 | 1 | 1 | 1 | Thrombogenic |
| Mitral valve prolapsed; mild pul. stenosis | 1/2 | 1 | 1 | 1 | 1 | 1 | Thrombogenic |
| Isolated PVCs and PACs | 1 | 1 | 1 | 1 | 1 | 1 | Arrhythmic Thrombogenic |

Bold=Working Group⁷ Normal=USMEC⁹ Underlined=Working group and USMEC

^arepaired without sequelae vs. non-repaired ^bincidental vs. symptomatic

Table 3: Contraception for moderate pregnancy risk conditions²

| Condition | CHC | POP | Injection | Implant | L N G - IUD | Cu - IUD | Primary Contraceptive Concerns |
|---|--------------------------|----------|------------------------|----------|-------------|----------|---|
| Repaired Tetralogy of Fallot | 1 | 1 | 1 | 1 | 1 | 2 | Endocarditis Thrombogenic |
| Arrhythmias Atrial Flutter/ Fibrillation Other | 4/3^a | 1 | 1/3^a | 1 | 1 | -- | Thrombogenic |
| Mild LV dysfunction (EF = 40-50%) | 2/4 | 1 | 1 | 1 | 1/2 | 2 | Fluid retention Hypertension Thrombogenic |
| Hypertrophic cardiomyopathy | 2/3/4^b | 1 | 1 | 1 | 1 | -- | Arrhythmic Endocarditis Thrombogenic |
| Moderate native valve disease | 2/4^c | 1 | 1 | 1 | 1/2 | / | Endocarditis Thrombogenic |
| Mild aortic root disease | 2 | 1 | 1 | 1 | 1 | -- | Hypertension |
| Marfan without dilation | 1 | 1 | 1 | 1 | 1 | | |
| Bicuspid aortic valve with aortic root <4.5 cm | 1/3^d | 1 | 1 | 1 | 1 | | |

Bold=Working Group⁷ Normal=USMEC⁹ Underlined=Working group and USMEC

^aNot on warfarin vs. on warfarin ^bIsolated lesion (2) vs. with associated sequelae(3 vs.4) ^cUncomplicated vs. complicated ^dUncomplicated vs. with hypertension or aneurysm

Table 4: Contraception for high risk pregnancy condition²

| Condition | CHC | POP | Injection | Implant | LNG-IUD | Cu - IUD | Primary contraceptive concerns |
|--|---------------------------|---------------------------|-------------------------|---------------------------|---------------------------|----------|--|
| Myocardial infarction | <u>4</u> | <u>1/2/3</u> ^a | <u>1/3</u> | <u>1/2/3</u> ^a | <u>1/2/3</u> ^a | 1 | Glucose metabolism Hypertension Lipid metabolism Thrombogenic |
| Mechanical prosthetic valve | <u>3/4</u> ^b | <u>1</u> | <u>1/3</u> ^c | <u>1</u> | <u>3</u> | <u>4</u> | Bleeding on anticoagulation Endocarditis Thrombogenic |
| Complex CHD: Cyanotic heart disease without pulmonary hypertension | <u>4</u> | <u>1</u> | <u>2/3</u> ^c | <u>1</u> | <u>2</u> | 3 | Thrombogenic Arrhythmia |
| Fontan circulation (single ventricle) | <u>4</u> | <u>1</u> | <u>3</u> | <u>1</u> | <u>3/4</u> ^d | <u>4</u> | Bleeding on anticoagulation Vasovagal |
| Aortic root dilation (>4 cm) | <u>3</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | --- | Hypertension |
| Peripartum cardiomyopathy: Normal Mild impairment | <u>2/3/4</u> ^e | <u>1</u> | <u>1</u> | <u>1</u> | <u>1/2</u> | <u>2</u> | Arrhythmia Endocarditis |
| Moderate/severe impairment | 4 | <u>1/2</u> | <u>1/2</u> | <u>1/2</u> | <u>1/2</u> | 2 | Fluid retention Thrombogenic |

Bold= Working Group⁷ Normal=USMEC⁹ Underlined=Working group and USMEC ^aInitiation vs. continuation for USMEC ^bBi-leaflet mechanical valve on warfarin vs. Bjork-Shiley or Starr-Edwards valve on warfarin

^cNot on warfarin vs. on warfarin ^d3 if no other method appropriate and risk of pregnancy outweighs vasovagal risk of insertion ^e<6 month vs. > 6 months for USMEC¹⁰

Conclusion

The risks associated with pregnancy in women with cardiac disorder vary widely and depend on her cardiac status. The appropriate counseling of these high risk women about various contraceptive methods in order to prevent unwanted pregnancy and maintain preconception cardiac health is of utmost importance. Choice of contraception for these women depends on efficacy of the method, risks associated with administration and long term use, level of risk if the woman becomes pregnant and the woman's own personal choice.

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*A birth control pill for men, that's fair.
It makes more sense to take the bullets out of the gun than to wear a bulletproof vest*
- Author Unknown

Familiarity breeds contempt - and children
- Mark Twain, Notebooks, 1935

Contraception in Medically Challenging Situations (3): Options for Women at risk of or with STIs, HIV and AIDS

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The Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO recommend that women and girls who are sexually active should have full access to information and counselling in order to make informed choices about their sexual and reproductive health needs. They must also have access to the widest range of contraceptive and HIV prevention options and these services should be provided in an integrated manner by all health workers.

Although, a range of contraceptive options are available for protection against unintended pregnancies in women at risk of or with STI (sexually transmitted infections), HIV and AIDS, only condoms, both male and female, provide dual protection by reducing transmission of infection and preventing unintended pregnancies.

Contraceptive option for women with STIs/ at risk for STIs

In women with STI, purulent cervicitis, Chlamydia or Gonorrhoea, an IUD (Cu or LNG containing) should not be inserted (WHO category 4). However, if a current IUD user becomes infected with gonorrhoea/chlamydia or develops PID, IUD can be safely continued during and after treatment (category 2). Spermicides and hormonal method (combined oral contraceptives, progestin-only pills, progestin-only injectables, monthly injectables, patch, ring and implants) can be safely prescribed to these women (category 1).

Women with other STIs except HIV infection and those at risk of developing STI, can freely use COCs/P/CVR (combined oral contraceptives, combined contraceptive patch and combined contraceptive vaginal rings), CICs

(combined injectable contraceptives), POP (progesterone only pill), DMPA/NET-EN or LNG/ETG implants, as they fall in category 1. IUDs can generally be inserted in this group of women (category 2); however, women at very high risk of acquiring STIs should not have IUD inserted, as they are in category 3. (For WHO categories, please refer to article on contraception in diabetes, liver and renal diseases).

Contraceptive option for women with HIV infection/clinical disease

Women with asymptomatic HIV infection or WHO stage 1 or 2 clinical disease can use COCs/P/CVR, CICs, POPs, POIs (DMPA and NET-EN) and LNG and ETG implants (category 1). These women can generally use IUDs (both Cu and LNG containing), category 2.

Women with advanced HIV clinical disease, WHO stage 3 or 4, can use COCs/P/CVR, CICs, POPs, POIs and LNG and ETG implants, category 1. However IUDs (both Cu and LNG containing), should not be inserted in these women, category 3. Women, who develop advanced HIV clinical disease while using IUD, need not have IUD removed. Refer to table for contraceptive options in women on antiretroviral therapy (Table 1).

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Table 1: Contraceptive options for women on ART¹

| ARV | COCs/ P/CVR | CICs | POP | DMPA NET-EN | LNG/ETG implant | Cu- IUD | | LNG-IUD | |
|----------------------------------|-------------|------|-----|--------------------|-----------------|---------|---|---------|---|
| NRTIs | 1 | 1 | 1 | 1 | 1 | 2/3* | 2 | 2/3* | 2 |
| NNRTIs (Etravirine, Rilpivirine) | 1 | 1 | 1 | 1 | 1 | 2/3* | 2 | 2/3* | 2 |
| NNRTIs (Efavirenz, Nevirapine) | 2 | 2 | 2 | DMPA-1 NET-EN-2 | 2 | 2/3* | 2 | 2/3* | 2 |
| Protease inhibitors | 2 | 2 | 2 | DMPA-1 NET-EN-2 | 2 | 2/3* | 2 | 2/3* | 2 |
| Integrase inhibitor, Raltegravir | 1 | 1 | 1 | 1 | 1 | 2/3* | 2 | 2/3* | 2 |

*for advanced clinical infection, WHO stage 3 and 4

Challenges in Implementation of PPIUCD Programme

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Recently, the global community experienced a resurgence of interest in postpartum intra uterine contraceptive devices (PPIUCDs) and as a result, programmatic experience has expanded. Globally, more women are delivering in facilities, which provide increased opportunities for postpartum family planning (PPFP), including PPIUCD services. The Copper T 380A intra-uterine contraceptive device (IUCD) is a highly effective, non-hormonal method that can be safely used by all women regardless of breastfeeding status during the postpartum period. According to the World Health Organization Medical Eligibility Criteria, an IUCD can be inserted in the 48 hours postpartum, referred to here as a postpartum IUCD (PPIUCD), or after six weeks following a birth¹. A 2010 Cochrane review concluded that PPIUCDs were a safe and effective contraceptive method. The public health benefits from PPIUCDs stemmed from the women's increased accessibility to PPIUCDs following facility births, as PPIUCDs could be offered at health facilities after childbirth. This, in turn, decreased opportunity and other costs incurred by clients who may otherwise have to return to facilities to access contraceptive services².

Summary of PPIUCD activities in India

Nationally, very large unmet need exists: 65% of women in the first year postpartum have an unmet need for FP, but only 26% are using any contraceptive (Source: USAID/ACCESS, India, 2009). With increasing numbers of women electing to give birth in health institutions after introduction of Janani Suraksha Yojana (JSY), the Government of India decided to strengthen PPFP and to introduce PPIUCD services in a phased manner, with the first batch of clinician trainings, in 2009. A national training centre was established at Safdarjung Hospital in New Delhi, as well as three regional training centres in Mumbai, Jabalpur, and Lucknow in 2009-2010 with USAID's support through the ACCESS-FP Program. After the success of the initial phase, there was a rapid expansion of PPIUCD services during 2010-12. With support from national and state governments and from multiple donors (USAID, Bill and Melinda Gates Foundation, Norway-India Partnership Initiative, Packard), PPIUCD services were scaled up in 19 states.

More than 100,000 PPIUCD insertions were reported in the states since the routine data collection system

was introduced in February of 2010. New PPIUCD government policies were initiated like dedicated counsellors and task shifting wherein nurses are allowed to insert PPIUCD, in late 2012. Further scale-up of PPIUCD services has taken place at district hospitals in six high focus states.

According to a recently published study nearly all women (99.6%) reported that they were satisfied with IUCD at the time of insertion and 92% reported satisfaction at the six-week follow-up visit³. The rate of expulsion of IUCD was 3.6% by six weeks of follow-up.

Experience at Safdarjung Hospital

After the introduction of this programme at Safdarjung Hospital in 2010, a lot of trainings have been done for hospital staff and faculty from medical colleges and hospitals all over India.

Table 1: PPIUCD insertions at Safdarjung Hospital.

| Year | Vaginal PPIUCD (%) | | Intra Caesarean PPIUCD (%) | Total (no. of patients) |
|------|------------------------------|----------------------------|----------------------------|-------------------------|
| | Post-placental within 10 min | Postpartum within 48 hours | | |
| 2010 | 43.44 | 26.94 | 29.61 | 1273 |
| 2011 | 31.04 | 10.07 | 58.88 | 1221 |
| 2012 | 11.71 | 29.25 | 59.03 | 1716 |
| 2013 | 16.67 | 9.03 | 73.76 | 1925 |
| 2014 | 29.08 | 9.68 | 61.23 | 3428 |

As evident from Table 1 there has been an increasing trend in utilisation of PPIUCD services over past five years in our hospital. Another significant observation made is the increasing number of intra-caesarean application of PPIUCDs. This indicates both the rising number of caesarean deliveries and greater motivation of women undergoing caesarean section to adopt this method of postpartum contraception. The probable reason behind this trend is the opportunity of one to one counselling and better receptivity before undergoing a surgical procedure.

Challenges in implementation

1. *Provider based:* Not all the healthcare providers especially those in the private set-up are providing PPIUCD services. There still exists a widely prevalent provider bias and lack of motivation

and confidence, the probable reason being fear of complications. Another important factor responsible for the hesitation of practitioners is the vicious client-provider cycle in the era of litigation these days. Provider biases and lack of confidence in insertion skills keep many providers from discussing PPIUCD with their clients.

2. *Acceptor/client based:* The myths and misconceptions which prevail especially in the illiterate section of our society regarding the use of IUCD is a big hurdle. The poor education level and psychosocial pressure of family and peer group remain a major deterrent in effective utilisation of services. Lack of male involvement may inhibit some women from getting a PPIUCD, especially if they are first learning of it at the delivery site and have not had an opportunity to discuss it with their partners.
3. *Counselling:* Due to the heavy load of deliveries at our and most government run facilities, the extent to which both pre-insertion and post-insertion counselling should be done has not been achieved. Overburdened staff finds it difficult to spend sufficient time on FP counselling. Another drawback is that the counselling stresses more on the benefits of the programme whereas side effects are not discussed at length, leading to client anxiety and dissatisfaction later on. Follow-up counselling is also important to resolve these issues.
4. *Follow-up:* Despite all the efforts, follow up of the PPIUCD acceptors is deficient and in spite of being the pioneers in PPIUCD insertions; we are witnessing only 30-40% of follow-up rate at our hospital. One of the reasons is that our hospital caters to a large section of migrant population and referred cases from neighbouring States who are lost to follow up. Further, many women get the PPIUCD removed in peripheral centres due to some reason or the other and never report back to the providing facility.
5. *Documentation:* The data collection processes and tools are cumbersome. National systems (HMIS) often do not capture PPFP or PPIUCD-specific indicators. Many providers do not feel compelled to collect data that is not in the HMIS, and without their buy-in, there is no incentive to translate data into action. Qualitative data is not collected. There is lack of integration of collected data into health management information system (HMIS).
6. *Missing strings after intra caesarean PPIUCD:* There is a pertinent problem of missing strings during PPIUCD follow ups. In our experience this issue is more prevalent in the clients who had insertion with

LSCS. Every time convincing the client for in-utero IUCD confirmation with sonography is a big challenge in itself. Also need for invasive methods to remove IUCD with non visible strings is another stressful experience- both for the client and the provider.

7. *Request for removal:* Women most commonly report expected side effects of IUCDs as the reasons for the removal, including bleeding and abdominal pain. These findings suggest that there is room for strengthening PPIUCD counselling services, particularly regarding normal side effects and complications that arise from method use. In our observation, the commonest cause of request for removal was psychosocial (52.48%), followed by menstrual complaints (23.80%) and persistent pelvic pain (9.52%) in the women who got caesarean PPIUCD inserted⁴. Missing strings, discharge per vaginum, pelvic infection, weakness and generalised body-ache are other common reasons for PPIUCD removal.

Gains of PPIUCD programme

1. In spite of all the challenges faced in implementation of the PPIUCD programme, the very fact that this programme has been able to fulfill at least a fraction of unmet need of our population in the field of postpartum contraception is an important gain.
2. In our experience we have found that with the help of this programme, a large section of population is now at least sensitized to the concept of postpartum family planning needs and methods available.
3. Removals and expulsions of PPIUCD which is around 20% in our experience, does not take away the fact that around 80% of women are continuing with this method of postpartum contraception.

Measures to further strengthen the programme

1. Efforts are being made by the Delhi Government to electronically streamline the tracking system of PPIUCD programme. Data collection systems for adverse events/complications and PPIUCD removal both need to be strengthened. Simpler tools that do not require providers to use multiple registers are ideal. Use electronic records wherever feasible. Periodic facility-based data audits and regular facility-level monitoring and evaluation (M&E) meetings will help improve data quality and to identify training needs.
2. With the high level of acceptance despite low levels of awareness, the government also needs to develop strategies to increase public awareness of the PPIUCD

through different media sources. Coordination among all units that target maternal and reproductive health (including HIV) at the Ministry of Health level is the key.

3. Both pre and post PPIUCD insertion counselling services need to be improved. This can be achieved by provision of dedicated or lay counsellors for this purpose especially in busy tertiary care referral hospitals like ours. To make counselling less time consuming for providers, a prior sensitization through community outreach or group education sessions during ante natal period can be done. Integration of PPIUCD with existing counselling given in ANC clinics and post-delivery can also help immensely.
4. To improve the quality of counselling, counselling skills should be emphasized upon during training. Standardized job aids and checklists should be introduced. Counselling should be a part of supportive supervision visits and on-the-job training. Recognition and other non-monetary incentives can be offered for quality counselling. Whole-site orientation can be done to sensitize all staff to PPIUCD so that they can support clients rather than perpetrate myths. Also, maternal health staff working in the labour ward, ANC, and PNC should all be trained in PPIUCD counselling, and a provider trained in insertion should be available round the clock.
5. There needs to be strengthening of follow up care after PPIUCD insertions which is a vital component for ensuring detection of early expulsions and higher continuation rates. Ensure that clients understand what to expect, where to go, and timing and importance of postnatal follow-up. Current guidelines recommend that asymptomatic IUD users should return for a follow-up visit after 3-6 weeks of insertion⁵. There can be coordination of PNC with other visits to the health center, such as immunizations, to make it more convenient for the client. Community health workers can be included in follow-up and referral for PPIUCD clients.
6. There should be time to time reinforcement of the acquired skills regarding PPIUCD at provider level. The expulsion rate is not very high and it

can be reduced with practice. It is also important to arrange training programmes on PPIUCD in order to increase knowledge and skills among healthcare providers especially at the grass root level. Supportive supervision will help to keep providers motivated to provide PPIUCD services.

7. Cash incentives to the acceptor, motivator and of course provider can bring about a substantial progress in the PPIUCD use in developing countries like India. The incentive to the client should be linked with at least one follow up visit of the client to the same health facility and it can be linked with the MCTS scheme. This would further help in self-appraisal of the services provided at provider level too.

PPIUCDs still represent a small proportion of long-acting reversible contraceptive service delivery, and there is still lot more to do to make this option available to every woman who delivers in a facility. Continuity of care for PPIUCD services begins during ANC counselling and carries through to insertion at the delivery site, postnatal follow-up visits, and beyond in order to ensure on-going access to information, side effects management, and removal services.

References

1. World Health Organization: Medical Eligibility Criteria for Contraceptive Use. 4th edition. Geneva: World Health Organization; 2010.
2. Grimes D, Lopez LM, Schulz KF, Stanwood NL: Immediate post-partum insertion of intrauterine devices. Cochrane Database Syst Rev 2010, 12, CD003036.
3. Kumar et al.: Women's experience with post partum intrauterine contraceptive device use in India. Reproductive Health 2014 11:32. doi:10.1186/1742-4755-11-32
4. Singal S, Bharti R, Dewan R, et al. Clinical Outcome of Postplacental Copper T 380A Insertion in Women Delivering by Caesarean Section. Journal of Clinical and Diagnostic Research : JCDR. 2014;8(9):OC01-OC04. doi:10.7860/JCDR/2014/10274.4786.
5. Long-acting reversible contraception the effective and appropriate use of long-acting reversible contraception. Regents Park, London: National Collaborating Centre for Women's and Children's Health Commissioned by the National Institute for Health and Clinical Excellence; 2005. October 2005.

The best contraceptive is the word no - repeated frequently
-Margaret Smith

We all worry about the population explosion, but we don't worry about it at the right time
-Arthur Hoppe

World Population Day 11th July

Request for Action

“Khushhaal Parivar ka Mantar, Do Bacchon mein Teen Saal ka Antar”

World Population Day (WPD) is an annual event, observed on 11th July every year, which aims at raising awareness about global population issues. This day marks the date when the world's population reached 5 billion (11 July 1987).



Mobilization Fortnight

(दम्पति सम्पर्क पखवाड़ा)

27th June to 10th July

The Mobilization Fortnight also known as- “Dampati Sampark Pakhwada” involves extensive demand generation activities through involvement of all stakeholders and health functionaries at all levels.

Population Stabilization Fortnight

(जनसंख्या स्थिरता पखवाड़ा) **11th to 24th July**

The Population Stabilization Fortnight (service provision fortnight) also called- “Jansankhya Sthirta Pakhwada” provides us with an excellent opportunity to intensify the service delivery towards the ultimate goal of population stabilization.

In this regard, kind attention of all practitioners in public & private sectors/facilities is sought for their valuable contribution towards this Noble & Global cause in the form of:

- Counseling of eligible couples on various modern methods of contraception.
- Coverage of “unmet need of contraception” through provision of Family planning services.
- Wide Spread sensitization & capacity building exercises like updates & CME's for Medical & Paramedical staff to enhance their counseling skills.
- Intensive Information Education & Communication (IEC) activities e.g. Health Counseling, Focus Group Discussion, Street Play, Maternal and Child Health Camps.
- Post-partum Family Planning including Post-partum IUCD insertion within 48hrs of delivery may be intensively promoted as the unmet need is high during the postpartum period. Besides, the client is receptive to motivation during pregnancy.
- Post abortion contraception should also be promoted.
- IUCD is to be promoted as a safe, effective, long term spacing method.
- “Male participation in family health is to be promoted including adoption of NSV after completing family”.

Family Planning is the road to maternal and child health and thus a common responsibility of all.

Let us contribute through joint performance and why not also document our services.

The Numbers of male sterilization, female sterilization, IUCD and PPIUCD conducted during “Population Stabilization Fortnight” are to be reported on a daily basis to respective CDMO offices for incorporation in District Report.

Proforma for Daily Reporting of Family Planning Performance of (Private/Public Facilities) during the Population Stabilization Fortnight

| Name of Facility | Date (11th to 24th July) | Male sterilization | Female Sterilization | IUCD | PPIUCD |
|------------------|--------------------------|--------------------|----------------------|------|--------|
|------------------|--------------------------|--------------------|----------------------|------|--------|

Note: 1. Please submit daily by 2 pm to respective CDMO's during the fortnight (11th - 24th July)

2. Performance after 2 pm is to be added in next day's performance.

(for further details refer to email from AOGD)

Anticipating a whole hearted and proactive participation from entire Private/Public Sector.

LET US PERFORM !! CONTRIBUTE !! DOCUMENT !!

on this WORLD POPULATION DAY 2015.

E-Mail Address of CDMO Offices:

- Central <dpmucentral@gmail.com>
- Newdelhi <dpmunewdelhi@gmail.com>
- North East <dpmunortheast@gmail.com>
- South <dpmusouth@gmail.com>
- West <dpmuwest1@gmail.com>
- Southeast <dpmusoutheast@gmail.com>
- East <dpmueast@gmail.com>
- North <dpmunorth1@gmail.com>
- Northwest <dpmunortheast@gmail.com>
- Southwest <dpmusouthwest@gmail.com>
- Shahdara <dpmushahdara@gmail.com>

At the end of the two fortnights, a brief report comprising of all achievements may be mailed to CDMO's mail & WPD2015@gmail.com

Issued in Interest of the Programme

Directorate of Family Welfare, Govt. of NCT of Delhi

B & C Wing, 7th Floor, Vikas Bhawan-II, Civil Lines, Delhi - 110054

E-mail ID- dirdfw@nic.in, spofwelfare@gmail.com, Ph: 011-23813212, Fax: - 011-23813220



Meet the Luminary

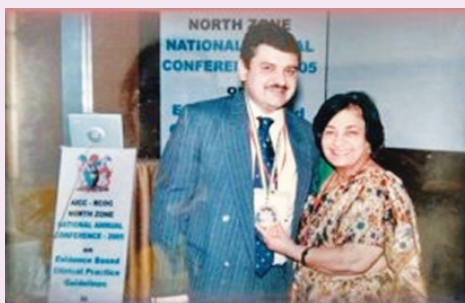
Down the Memory Lane with..... Dr Urmil Sharma

On a warm June afternoon I was welcomed equally warmly by an angelic face with a snow-white crowning glory and a divine sparkle in her eyes reminiscent of the mother fairy standing on the doorway. In no time I was comforted for proceeding with the interview. Following are a few excerpts from this legend of Delhi's Obs and Gynae fraternity.

Dr Harsha S Gaikwad

| | | | | |
|--|-----------------------------|--|---|---|
| Birthday 31 st January, 1933 | Sun sign Aquarius | Place of birth Ambala Cant. Pb | College Amritsar Medical College, Amritsar, Pb | If not a gynaecologist Medical Specialist |
| High point Seeing a smiling face of a mother with a healthy newborn baby after being saved from the clutches of death | | Low point The day I lost my husband Dr Kulbhushan Sharma, who made my life perfect and also of those around | | |
| Role model Professor Dr. Khushwant Lal Wig | | What makes your day Making patients and their families fully satisfied | Your strategy in a crisis Praying the Almighty for guidance | |
| One habit that you are proud of Always trying to be most helpful to anyone who needs it | | | How do you de-stress Meditation and prayers | Any regrets None |

A glimpse into the life of Dr Urmil Sharma



Honouring her son in a conference



With her husband, at the MRCOG convocation



Felicitations by Dr Green and his wife in UK



A family get together



One of the social group

A book that has made a lasting impression: Bhagwad Gita, Dalai Lama's book on Happiness

Your favourite pastime: Meeting friends, holidaying and travelling around the world with family especially on cruises

Your professional journey: Started career as a house surgeon in medicine and surgery at Irwin Hospital, Delhi then at Victoria Znanina Hospital as a house surgeon in Obstetrics & Gynaecology during 1957-1958. Worked as Gynecologist in UK in Eastbourne, Brighton, and London from Dec 1958 -1962. After coming back from UK, I worked as a Lecturer in MAMC from 1963-1966. Later on I joined AIIMS as an Assistant Professor from 1966 Oct-1973 Feb. Since then I have been in private practice and am attached to various hospitals as a visiting consultant and I was picked up as a Specialist gyn by British High Commission Hospital, where I looked after every embassy patient. It was a great experience no doubt, besides I worked mostly in Sharma Nursing home Kailash Colony and Holy Angels which was the only main private hospital in Delhi. Very comfortably looked after various senior families of Delhi. I got my FRCOG in 1979 and worked as a WHO consultant for countries like Maldives, Burma to name a few.

Event that made deep impact on your mind and motivated you to take up this profession: Seeing female patients in suffering, wanted to help them desperately.

What inspired you to become a gynaecologist: It was always my passion to be a gynaecologist

Any unfulfilled task: Want to help as many troubled females as possible, currently working with an NGO looking after old ladies deserted by their families at pilgrimage sites

Helpless moment of your early professional life: While studying in UK, I saw a patient dying due to undiagnosed rupture uterus.

Your current state of mind: Calm and satisfied though many miles to tread

A piece of advice to young gynaecologists: Be patient in any situation, have a personal touch in your behavior, think positively and do not criticize fellow doctors in public.

Any other message: Treat your patients as you would be treating your own relatives, be grateful to God, do some social work and prayers.

Events Held

Events held under the aegis of AOGD in June 2015

- CME organized by Gynae club IMA, Janakpuri, under aegis of AOGD on “**Stem Cell Therapy in Autism Disorders**” on 5th June, 2015.
- CME on “**Recent update on Endometriosis and Adolescent PCOD**” organized by Endometriosis committee of AOGD with East Delhi Gynae from on 10th June, 2015.
- **Women’s Comprehensive Health Camp** organized by VMMC & Safdarjung Hospital, coordinated by Dr Rupali Dewan under outreach activities, on 10th June, 2015
- CME on “**Adolescent PCOD**” by South Delhi Forum organized under aegis of AOGD on 11th June, 2015
- CME on “**Urology Issues in Gynae Surgeries**” organized by Endometriosis and Endoscopy committee of AOGD with North Delhi Gynae Forum on 12th June, 2015 at Fortis Hospital, Shalimar Bagh.
- **Health Camp** organized by Rural Health Committee on 19th June in Jhadole village of Dabra Tehseel of Gwalior district in collaboration with Arogya Foundation of India.
- **Tips & Tricks in Endometriosis Management** on 24th June in association with DGES, GESI, and AOGD
- “**Monthly Clinical Meeting**” at R & R Hospital on 26th June, 2015
- “**Advanced Infertility Management Conference**” organized Fortis Bloom IVF group in association with Gynecological Endocrine Society of India under aegis of AOGD on 27-28 June, 2015.
- CME on “**Fetal Therapy are we there yet**” organized by AOGD fetal medicine and Genetics sub-committee at Fortis, La Femme on 3rd July, 2015.
- CME on “**Secondary Amenorrhea and AUB in reproductive age group**” organized by AOGD Reproductive Endocrinology sub-committee on 7th July, 2015.



CME on “Urology Issues in Gynae Surgeries”



CME on “Recent update on Endometriosis and Adolescent PCOD”



Women's comprehensive health camp



CME on “Adolescent PCOD”



Tips & Tricks of Endometriosis Management



Monthly AOGD meeting at R&R



Advanced Infertility Management Conference



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HIGHLIGHTS OF GYNAE ONCOLOGY DEPARTMENT

- Preventive oncology including colposcopy and treatment of CIN
- Radical surgeries for all gynecological Cancers.
- Fertility sparing surgeries and ovarian tissue cryopreservation
- Fellowship in gynae oncology recognized by AGOI
- Chemotherapy for all gynae cancers including targeted chemotherapy
- Cutting edge technology for radiotherapy including rapid arc.

Our Specialities:

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- Gynae Oncology
- Uro Oncology
- Surgical Oncology
- Radiation Oncology
- Nuclear Medicine & PET.CT



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Website: www.actioncancerhospital.com

email: ach@actioncancerhospital.com

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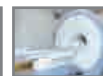
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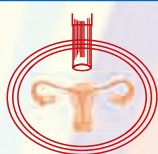
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Tel: +91-11-46595811, 41827334

Email: thalcind@yahoo.co.in; thalasseemicsindia@gmail.com

www.thalasseemicsindia.org



FENIX - 2015

28th - 30th August, 2015, J L N Auditorium AIIMS, New Delhi

Annual Conference of Delhi Gynaecological Endoscopists Society

Women- Fertility and Beyond: Inception to Xcellence



इतिहासं चतुर्धनं

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Precongress Workshop
28th August, 2015
Annual Conference
29th - 30th August, 2015

CALL for Abstracts
before
31st July, 2015
MCI Credit
Points Applied

Non Residential Package

| Registration fee | Conference + Workshop | | |
|-------------------------|-----------------------|------------|--------|
| Dates | Member | Non-Member | PG |
| Upto 30th June, '15 | 3500/- | 4000/- | 2500/- |
| 1st July to 15 Aug, '15 | 4500/- | 5000/- | 3000/- |
| Late & Spot | 5500/- | 6500/- | 4500/- |

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| Room Type | Single Occupancy | Twin Sharing |
|---------------------|------------------|-----------------|
| Till 31st July, '15 | 28000/- | 18000/-per head |
| 1- 16 Aug, '15 | 32000/- | 22000/-per head |



Dr Alka Kriplani
Organizing Chairperson



Dr Garima Kachhawa
Organizing Secretary

Infertility Sessions
• Basics and Advance

Address for Correspondence:
Department of Obstetrics and Gynaecology
3076, Teaching Block, 3rd Floor,
All India Institute of Medical Sciences, New Delhi-110029
Tel: 011-26594933, 01126593221, 7530935946, 9560408539
email id: dgesaiims2014@gmail.com

37th Annual Conference of Association of Obstetricians and Gynaecologists of Delhi

Dates: 31st October, 2015 & 1st November, 2015 • Venue: India Habitat Center, Lodhi Road, New Delhi

Scientific Programme

| Time | Hall A (Obstetrics) | Hall B (Gynecology) | Time | Hall A (Obstetrics) | Hall B (Gynecology) |
|--------------|--|--|--------------|---|--|
| Day 1 | | | Day 2 | | |
| 09.00-10.00 | Newer Horizons | Newer Horizons | 09.00-10.00 | Competition Papers | Endoscopic Videos |
| | Pre eclampsia; New Insight | Role of AMH in infertility | | | Single incision lap Hysterecomy |
| | New Concepts in Labour Management | Endometrium in infertility management | | | The future of robotics in gynae endoscopy |
| | Multiple Pregnancy | Ovarian Stimulation in extreme cases- Low reserve and PCOS | | | Fertility Enhancing surgeries |
| 10.00-11.00 | Obstetric Emergencies: Call for action | Gynae surgery: Unexpected challenges | 10.00-11.00 | Brain storming case discussions | Brain storming case discussions |
| | Postpartum Collapse | Vascular Injuries | | Heart Disease in pregnancy | Endometriosis in young women |
| | Altered Sensorium in Pregnancy | Urinary tract/intestinal injuries | | Renal Disorders in pregnancy | Recurrent & deep infiltrating endometriosis |
| | ARDS in Pregnancy | Sepsis following surgery | | Connective tissue disease in pregnancy | Treatment of Adenomyosis |
| 11.00-11.30 | New Insights | New Insights | 11.00-12.00 | Recent Advances in Obstetrics: Breaking news | Recent Advances in Gynecology Breaking news |
| | Cord Blood Stem Cell Storage | Current standards in management of ovarian malignancy | | New therapies for RPL | Pessary for pelvic organ prolapse |
| | Fetal Medicine Current Scenario | Current trends in management of carcinoma endometrium | | Oral Hypoglycemic Agents in Pregnancy | Botox for urinary incontinence |
| 11.30-12.00 | Inauguration | | | Magsulf for neonatal neuroprotection in Preterm labour | Conservative management of SUI & Biofeedback |
| 12.00-12.30 | Brig Khanna Oration | | 12.00-12.30 | FOGSI President Oration | |
| 12.30-13.00 | AOGD President Oration | | 12.30-13.00 | Invited Lecture | |
| 13.00-14.00 | Lunch | | 13.00-14.00 | Lunch | |
| 14.00-15.00 | Legal Tangles | Mixed Bag | 14.00-15.00 | Panel Discussion | Panel Discussion |
| | Birth injuries and the Law | Resistant PCOS | | Infections in pregnancy | Contraception |
| | Terminating pregnancy in 2 nd trimester | Hyperprolactenemia & obesity | | Preconception counselling | Fertility preservation |
| | ART and the Law | New biomarkers in Malignancy | 15.00-16.00 | Debates | Debates |
| | Sudden maternal death | Sperm Test - What Should Be Tested? | | Prolonged pregnancy: We should wait | Empirical ATT for Infertility in India |
| 15.00-16.00 | Guideline capsules: | Guideline capsules: | | Elective cesarean section: Should be done at 39 weeks | Morcellation in laproscopic myomectomy |
| | Decoding APLA | Luteal phase support | | Isolated oligoamnios in 3rd Trimester: Action is required | 3D & 4D Ultrasound is a breakthrough |
| | Targeted Ultrasound in Obstetrics | Intrauterine Insemination | | NIPT is the best option for prenatal testing | DHEA in women with poor ovarian reserve is a must |
| | Rationalizing Blood component therapy | Menopause risk reduction strategies | 16.00-17.00 | Slogan Competition | |
| 16.00-17.00 | The Quest continues | The Quest continues | | Valedictory Session | |
| | Hydrocephalus: should it be drained ? | Medical management of fibroids | | | |
| | MSL: Is it a true indicator of fetal distress ? | Role of sentinel node in gynae malignancies | | | |
| | Screening for Aneuploidy: the best time | Frozen Section...is it a waste of time | | | |
| | Vitamin D supplementation: the right dose | | | | |

Competitions

Theme Topic

- Critical care in Obstetrics & Gynaecology
- Preventive Health Care in Obstetrics & Gynaecology
- Miscellaneous

Please post one copy of your abstract to AOGD office (sumitrabanchani@gmail.com) & another copy to the following persons in-charge as appropriate to your presentation.

Last date for accepting free paper and poster abstract is 20th September, 2015 and for competition papers is 15th September, 2015. Candidates applying for competition papers should be of less than 30 yrs age.

Oral Presentation: Free Paper

Dr. Renu Arora: 9971103615
renuarora2010@yahoo.co.in

Oral Presentation: Competition

Dr. Vijay Zutshi: 9818319110
drvzutshi@gmail.com

e-Poster Presentation

Dr. Saritha Shamsunder: 9313826748
shamsundersaritha@gmail.com

List of Prizes - AOGD Conference 2015

| | |
|---|--------------------------------|
| Dr. S N Mukherjee - Roating Trophy | Best Clinical Presentation |
| Research paper - Best Competition Paper | 3 Medals, Gold, Silver, Bronze |
| Dr. Batra's Medal - Winning team of AOGD | 1 Gold Medal |
| Dr Neera Agarwal Medal - Best Paper on theme topic obstetrics | 2 Medal, Gold, Silver |
| Dr Neelam Bala Vaid's Medal - Best paper on theme topic gynecology | 2 Medal Gold, Silver |
| Free Paper competition - Miscellaneous Category | 2 Medal Gold, Silver |
| Slogan Competition | First Prize, Second Prize |
| Dr. Suneeta Mittal - Population Stabilization | 1 Gold Medal |
| Dr. U.P. Jha & Dewan Balakram - Best Presentation in Gynae Oncology | 1 Gold Medal |
| Dr. U.P. Jha & Raj Soni-Best Oral/Video/Paper Presentation in Endoscopy | 1 Gold Medal |

For more details, visit: www.aogd.com



37th Annual Conference of Association of Obstetricians and Gynaecologists of Delhi



Theme:

“Promote Health, Protect Rights & Provide Quality Services”

Conference: 31st Oct., 2015 - 1st Nov., 2015 **Venue:** India Habitat Center, Lodhi Road, New Delhi

Registration Detail

(From may be photocopied. Kindly fill in Capital Letters)

Full Name: Qualification:

Specialty Category: ☐ Delegate ☐ PG Student ☐ Faculty

Organization: Designation

Address:

Pin Code:..... Mobile No.: Email ID:.....

Registration Fee

| Dates | Conference | | | Workshop | | |
|--------------------------|------------|-------------|-------------|----------|-------------|-------------|
| | Members | PG Students | Non-members | Members | PG Students | Non-members |
| Up to 30 September, 2015 | ₹ 3500 | ₹ 3000 | ₹ 4300 | ₹ 1500 | ₹ 1300 | ₹ 1700 |
| Up to 15 October, 2015 | ₹ 4000 | ₹ 3500 | ₹ 4800 | ₹ 1800 | ₹ 1600 | ₹ 2000 |
| Spot | ₹ 4500 | ₹ 4000 | ₹ 5300 | ₹ 2100 | ₹ 1900 | ₹ 2300 |

- All cheques/bank draft payable at New Delhi & should be made in favour of “AOGD Annual Conference 2015”
- Post Graduates have to attach a certificate from HOD and also be an associate member of the AOGD in order to attend and present a paper.
- It is mandatory to register for the conference in order to attend & register for any workshop.
- You may register for more than one workshop.

| Date | Workshop | <input checked="" type="checkbox"/> |
|-----------------|--|-------------------------------------|
| 28th Oct., 2015 | Oncology | <input type="checkbox"/> |
| 29th Oct., 2015 | Fetal Medicine | <input type="checkbox"/> |
| 29th Oct., 2015 | Endoscopy | <input type="checkbox"/> |
| 29th Oct., 2015 | Reproductive Endocrinology and Infertility | <input type="checkbox"/> |
| 30th Oct., 2015 | Endometriosis | <input type="checkbox"/> |
| 2nd Nov., 2015 | Urogynaecology and vaginal surgery | <input type="checkbox"/> |
| 2nd Nov., 2015 | Medico legal aspect “Mother & Child” | <input type="checkbox"/> |

Payment details:

Bank draft/cheque no..... Bank

Branch Total amount

CONFERENCE SECRETARIAT

Ward-8, Room No.-118 Department of Obst & Gynae, VMMC & Safdarjung Hospital, New Delhi-110 029
Phone No: 011-26181879, 26714473; Email: aogdsjh2015@gmail.com

Missing IUCD Strings - “A Dilemma”

Archana Mishra¹, Sarita Singh², Akanksha Mangla³, Pragati Dwivedi⁴

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Intra uterine contraceptive device is one of the most dependable method of reversible contraception with failure rate of about 2-3 pregnancies per 100 women years. Worldwide 14.3% of women are using this method. Popularity of IUCD varies from 0.2% to 40% in different countries depending upon policies of government, price, availability of providers and attitude of women. China has 64% of all the IUCD users of the world. Unfortunately in India only 2% of eligible women are using this method¹. Myths related with side effects and highly perceived fear of rare complications like perforation guides the under utilization of this safe and effective method.

Most of the IUCD's have tail in the form of strings, visible through the external os, which are examined periodically to ascertain the intrauterine location the IUCD. These strings also help in the removal of the IUCD as and when requested by the woman. Problem arises when these threads are not felt by the woman herself or are not visible on per-speculum examination of the cervix. Missing IUCD threads complicates 0.89 % of total users². It is not only a source of anxiety but many times it leads to premature removal of otherwise well placed IUCD.

Differential diagnosis of missing strings is

- Broken strings
- In rolled threads in posterior fornix
- Expulsion [50%]
- Retraction within uterine cavity.
- Upward displacement due enlargement of uterus; Pregnancy or fibroid [8-10%]
- Embedding of IUCD in uterine wall [partial perforation]
- Perforation and translocation of device [0.87%]

Clinical presentation^{3,4}

- Asymptomatic- 40%
- Pain in abdomen- 30-40%
- Pregnancy [intrauterine or ectopic]- 8-10%
- Vaginal discharge and menorrhagia- 10%
- Recurrent urinary symptoms- 10%
- Bowel symptoms- less than 10%

Risk factors and consequences of perforation

Uterine perforation by an IUCD is reported to occur in 0.87 per 1000 cases, varying from 0.05 to 13 per 1000 insertions⁵.

It does not affect the adjacent organs in about 85% of the cases. *The risk of perforation is considered to be maximum at the time of IUCD insertion. Risk factors for perforation are nulliparity, post abortal insertions, extremely retroverted /retroflexed uterus, and most importantly provider's inexperience.* Initially the IUCD usually gets embedded in the uterine wall and is later forced through the uterine wall by uterine contractions into the abdominal cavity. Chronic inflammation also facilitates the gradual erosion of uterine wall and migration of embedded IUCD⁶. If the IUCD perforates through all three uterine layers it is called a complete perforation. If the IUCD penetrates only the myometrium, it is known as partial perforation. Patient having perforation usually presents within 6 months and delayed presentation supports secondary migration⁷.

An IUCD displaced in the peritoneal cavity can cause bowel obstruction, perforation, abscess, and fistula formation. If the IUCD perforates the bowel, it can lead to complications like peritonitis and stricture formation. Perforation by a copper-containing IUCD is associated with an increased risk, because a severe inflammatory reaction can occur leading to a release of cytokines and degradation of the extracellular matrix, caused by matrix metalloproteinase.

Steps to be followed in case of missing strings

History and examination

The first step in the management of missing CuT strings begins with complete history and examination. Enquire about the type of IUCD, timing (type of insertion- post abortal, postpartum, during lactation) and duration of insertion. History of place and provider and difficulty encountered during insertion should be taken. History of expulsion of Cu T or its strings, history of pain abdomen, fever, any change in bowel and bladder habits or amenorrhea should be taken. Menstrual history should also include the duration of the cycle and menorrhagia if any. Proper per- speculum examination to visualize the cervix and vaginal fornices should be done followed by bimanual examination of the uterus for evaluation of the position, size and consistency of the uterus. The adnexa and the pouch of douglas should also be palpated for any nodularity or tenderness. Urine test for pregnancy should be done in case the woman gives history of amenorrhea. If uncomplicated intrauterine pregnancy is detected, patient may continue pregnancy if she desires. IUCD is most often recovered from the placental bed after delivery.

In case of post partum IUCD insertion thread may take time to descent. Usually 75% of threads are visible by the end of 3 months. So in case of asymptomatic post partum women reassurance and ruling out pregnancy is enough till 3 months of delivery. In postpartum insertion perforation is very rare but expulsion is common. Most of the expulsions occur within 3 months of delivery. After three months, the protocol mentioned below will be applicable along with other types of insertion.

Investigations

Ultrasonography should be done to evaluate the location of IUCD. Ultrasonography specially transvaginal USG, reliably confirms the position of IUCD and correctly delineates the location if the IUCD is found to be embedded in uterine wall. Thus it guides in the further management of the case.

X-Ray abdomen and pelvis, AP / lateral view are an alternative. This is especially useful to rule out migration of the device. In classical teaching X-Ray should be performed with a uterine sound or another IUCD in uterine cavity to differentiate an intrauterine IUCD from the one which has undergone pelvic migration. If both the IUCD'S overlap, then migration is ruled out.

CT abdomen, cystoscopy, proctoscopy and sigmoidoscopy may be offered as per the organ of migration. Extrauterine migration of IUCD may involve adnexa, broad ligament, pouch of Douglas, omentum, appendix, intestine, urinary bladder, rectum, and sigmoid colon⁸. There are reports of rare involvement of distant organs like stomach also.

Management

In case the IUCD is properly localized in the intra uterine cavity and the woman wants to avail its contraceptive/ medical (LNG-IUS) benefits, the client needs to be reassured and the IUCD need not be removed. But if the lifespan of the IUCD is over or the woman desires to conceive or is willing for other type of contraception such as sterilization then the IUCD needs to be removed. In case of broken threads IUCD may be removed and a new IUCD may be offered if the patient desires so.

Various methods have been devised to remove the IUCD with missing strings. It includes teasing with simple brush or suction cannula, intracervically to extract the coiled thread of IUCD, use of hook, long artery forceps, alligator forceps, Emmett IUD thread retriever, Mi-Mark helix and Retrievette IUD thread retriever (Fig 1). USG guided removal or hysteroscopic guided removal can also be done in difficult cases. Hysterotomy is rarely required for embedded IUCD. Proper dilatation of internal os should be achieved with the help of misoprostol before attempting any intra uterine manipulation. Patient should be given sedation and any attempt to dilate the internal

os should be preceded by para cervical block.

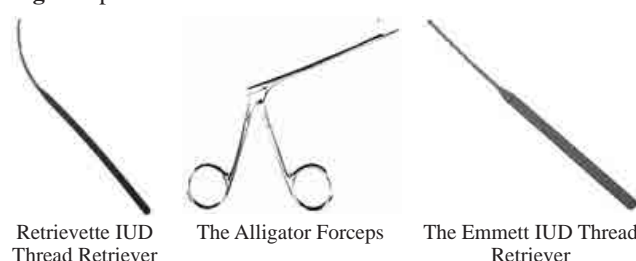
Laparoscopy is the preferred method of removing an intra-abdominal IUCD. Conversion to laparotomy is occasionally required owing to dense adhesions surrounding the misplaced IUCD.

Measures to prevent complications

Few precautionary steps may decrease the incidence of complications during IUCD insertion like assessment of uterine size and position before insertion. Withdrawal technique of insertion should be used and undue force should not be applied while insertion. Mere insertion is not the end of service and proper follow up needs to be emphasized. Feeling for IUCD threads is no more advisable on follow up as it can cause undue anxiety. There is difference in opinion about counseling women to feel the threads periodically. Self manipulation of threads may lead to displacement and removal of IUCD. Patient should be educated for regular follow up or if any adverse symptoms occur.

IUCD is the need of hour for our country. We as providers should execute every effort to decrease the failure and complication rate of IUCD and to increase its acceptance in eligible women.

Fig. 1: Special instruments for retrieval of IUCD



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DMPA Returns!!

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Gone are the days when the Black Box warning on inj. Depot Medroxy Progesterone Acetate (DMPA) created havoc in the family planning circle. Now DMPA is being used by more than 42 million women worldwide including many developed countries. Its use in developing countries is also on rise. It was approved for sale in India in 1994 by Drug Controller Of India (DCGI) and since then, it is available in the market and is being offered to women through the private sector¹. Developed in the 1950s and made available in the 1960s, injectable contraceptives are the 4th most popular contraceptive method worldwide after female sterilisation, intrauterine devices and oral contraceptive pills. Use of injectable contraceptive in India and neighbouring countries is shown in Table1 (NFHS-3 2005–06)². DMPA is a highly effective contraceptive that has a dose schedule of 4 times / year, making it appealing to many users, especially adolescents. DMPA eliminates the need of daily use and is neither coitus nor partner dependent³. Mechanism of action of DMPA is by inhibition of ovulation; thinning out of endometrium; and thickening of cervical mucus.

| | |
|-------------|------|
| Sri Lanka | 15% |
| Nepal | 10% |
| Bhutan | 5.9% |
| Afghanistan | 5.4% |
| Pakistan | 2.7% |
| Bangladesh | 11% |
| India | 0.1% |

Table1: Percentage-wise usage of injectable contraceptives in India and neighbouring countries

Advantages of DMPA⁴

DMPA is very effective (99.7%), safe and has flexibility of timing for repeat dose (2 weeks before or upto 4 weeks from date of last injection). It is long acting, does not affect quantity or quality of breast milk, is reversible and maintains confidentiality for the patient. It also has several non contraceptive health benefits, namely it protects against endometrial cancer, prevents iron deficiency anaemia, reduces PID, may help in preventing fibroids and is useful in patients of endometriosis.

Counselling the patient

Cafeteria approach has a great role in all family welfare services and DMPA gives one more choice in the contraceptive basket. The following key messages should be included while counselling a woman about DMPA^{1,4}

- Menstrual changes
- Effect on bone mineral density
- Return of fertility after last injection may take upto 1 year.

How to screen for DMPA?

DMPA can be given to all women except in the following conditions (WHO MEC Category 3&4)⁴

- Women breastfeeding infant < six weeks
- Unexplained vaginal bleeding before evaluation
- High blood pressure $\geq 160/100$
- Severe cirrhosis, liver tumors
- Migraine with aura, at any age
- Current or past history of breast cancer
- Current or h/o ischemic heart disease
- Diabetes of > 20 years, or complicated with nephropathy/ retinopathy/neuropathy
- Multiple risk factors for arterial cardiovascular disease (age >35 years, smoking, diabetes, hypertension)
- History of stroke
- Systemic lupus erythematosus, positive or unknown antiphospholipid antibodies, severe thrombocytopenia.

When can DMPA be started?

DMPA can be started in the interval period, post abortal or post partum period as shown in Table2.

Mode of administration^{4,5}

- Store DMPA in cool, dry place
- Wash hands with soap and water before and after giving injection
- Roll the vial gently before filling DMPA in syringe
- Do not shake vigorously, to avoid froth formation

- Give deep intramuscular injection into the gluteal or deltoid muscle
- Do not massage/foment injection site

DMPA is bottled in two formulations: 150 mg/ mL for intramuscular (IM) injection and 104 mg/0.65 ml for S/C injection (not available in India). It is repeated after every 3 months (13 weeks) because low solubility of the microcrystals, allows pharmacologically active drug levels to persist and remain effective for several months.

Post-injection message to DMPA client

- Injection needs to be repeated every 3 months (13 weeks)
- Return on time for next injection-try and come as per date given. However there is flexibility of 2 weeks earlier and 4 weeks later than 3 months
- Expect menstrual bleeding changes and not to get

unduly alarmed

- To return if any problems, or client thinks she is pregnant

Side effects

Side effects are the main cause for discontinuation in the 1st year^{4,5}. These are:

- Changes in bleeding pattern (irregular bleeding, amenorrhoea)
- Weight gain(2-3 kg in one year)
- Headaches
- Dizziness
- Abdominal bloating, discomfort
- Mood changes
- Less sex drive
- Loss of bone density

Table 2: When to start DMPA

| | Situation | Instructions for service provider |
|--|---|--|
| Women having menstrual cycle | Day 1-7 of periods | Give DMPA. No back up method required |
| | >7 days after period | Take h/o unprotected coitus since LMP <ul style="list-style-type: none"> • No h/o unprotected coitus-give DMPA and advise backup method for 7 days • If history present-do not give DMPA Advise condom till next menses |
| Post-abortion women | Immediately after abortion / within 7days | Give DMPA. No backup method required |
| | >7 days after abortion | Take h/o unprotected coitus since LMP <ul style="list-style-type: none"> • No h/o unprotected coitus-give DMPA & advise backup method for next 7 days • If history present-do not give DMPA. Advise condom till next menses. |
| Post-partum, Fully breast feeding women | <6weeks postpartum | Delay 1 st injection until 6 weeks postpartum |
| | 6 weeks postpartum | Give DMPA.-no backup method required |
| | 6 weeks-6 months postpartum | Ask about resumption of menses <ul style="list-style-type: none"> • If no menses,3 conditions of LAM are being met-give DMPA, no backup method required. • If menses have returned, DMPA can be given as advised in women having menstrual cycle. |
| | >6 months postpartum | Ask about resumption of menses <ul style="list-style-type: none"> • If no menses-give DMPA, after being certain that she is not pregnant. Also advise back up method for next 7 days. • If menses have returned, DMPA can be given as advised in women having menstrual cycle. |
| Post-partum, partially breast feeding women | <6 weeks postpartum | Delay 1 st injection till 6 weeks postpartum |
| | 6 weeks postpartum | Give DMPA. No backup method required |
| | >6 weeks postpartum | Ask about resumption of menses <ul style="list-style-type: none"> • If menses have returned, DMPA can be given as advised for women having menstrual cycle • If no menses-Give DMPA, after being reasonably certain that she is not pregnant. Advise backup method for next 7 days |
| Post-partum women not breast feeding? | <4 weeks postpartum | Can start DMPA any time-No backup method required. |
| | >4 weeks postpartum | Take history of resumption of menses <ul style="list-style-type: none"> • If menses have returned, DMPA can be given as advised for women having menstrual cycle • If no menses-Give DMPA, after being certain that she is not pregnant. Advise backup method for next 7 days |

Management of clients with changes in menstrual pattern

No monthly bleeding

- Reassure her that most women on injection stop having monthly bleeding which is not harmful
- She is not infertile and neither blood is collecting inside her

Irregular bleeding

- Reassure her that this becomes less or stops after first few months of use
- For short term relief-500 mg mefenamic acid BD x 5 days.
- If irregular bleeding continues or starts after several months of normal or no monthly bleeding, then evaluate for other reasons and treat accordingly.

Heavy or prolonged bleeding

- Reassure her
- 50 µg of ethinyl estradiol daily for 21 days
- Iron tablets and iron rich diet to prevent anaemia
- If bleeding becomes a health threat, or if woman wants, help her choose another method.

DMPA and bone health

The concerns about the effect of DMPA on the bone health have been addressed by several studies. Some of them are summarized in the box below

Follow up

The follow up of clients who come in the safe window, outside of it and suspected to be pregnant is given in the boxes below

Follow-up of DMPA client coming for next injection within re-injection window

| Time of visit | Action to be taken | Points for re-inforcement |
|--|--|---------------------------------------|
| 2 weeks earlier or up to 4 weeks later than 3 months | Give DMPA injection, no backup method required | Tell her importance of coming on time |

Follow-up of DMPA client coming >4 months for next injection

| Action to be taken | How to rule out pregnancy |
|---|--|
| <ul style="list-style-type: none"> • Rule out pregnancy • Give DMPA • Advise backup method for next 7 days • Offer other method if 3 monthly visits difficult. • If pregnancy confirmed- can continue pregnancy as no risk to fetus⁴. | <p>Ask following questions—she is not pregnant, if any answer is yes</p> <ul style="list-style-type: none"> • Has she abstained from sex after 4 months were over? • Has she been using a reliable contraceptive method consistently and correctly after 4 months were over • Has she used emergency contraceptive pills after every act of unprotected sex after 4 months were over. |

Conclusion

There is a growing demand for injectables from women visiting public sector facilities. According to NFHS-3, 53% of married women in India have knowledge about injectable contraceptives. The wealth of research on the safety of method is encouraging for the potential addition of injectables to the national family welfare programme. Based on approvals from WHO, FDA-U.S. and DCGI, FOGSI issued a consensus statement in 2000, stating and confirming that injectables are a safe, effective and convenient form of contraception, particularly for lactating and estrogen sensitive women. Extensive trials carried out in ICMR have proved that the method is reversible and with additional health benefits².

Cross sectional studies of DMPA & bone health

- BMD loss of 0.5–3.5% at hip and spine after 1 year^{6,7}, 5.7–7.5% loss after 2 years^{8,9} and 5.2–5.4% loss after 5 years of use¹⁰.
- Recovery of BMD occurs after discontinuation of DMPA. The speed and completeness of BMD recovery differs by duration of DMPA use and by anatomic site^{10,11,12,13-16}.
- In 2005, WHO recommendations on use of DMPA⁴
 - There should be no restriction on use of DMPA, including no restriction on duration of use, among women aged 18-45, who are otherwise eligible for use.
 - Among adolescents (menarche to <18 years), and women over 45 years, the advantages of using DMPA generally outweigh the theoretical safety concerns regarding fracture risk⁵

Keypoints

- BMD loss with DMPA is not significant
- Is reversible
- Pregnancy and breastfeeding too cause BMD loss
- Unmet need for family planning is high, hence there is need for expanding basket of contraceptive choice with DMPA

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Standards and Quality Assurance in Sterilization Services - 2014 (1)

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India has traversed a long and onerous path since launching the first ever 'Family Planning Program' in the world in 1952. The program has further evolved from a targeted approach to a target free approach and is seen as a critical intervention to reduce maternal and child mortality and morbidity beyond a simple strategy for achieving population stabilization. India made a global commitment at the London Summit 2012, that of ensuring access to family planning services to 48 million (4.8 Crore) additional women by 2020 (40% of the total FP 2020 target) and sustaining the coverage of over 100 million (10 Crore) women currently using contraceptives¹.

An important strategy to ensure universal access to female sterilization is the promotion of a standard, safe, and efficient technical approach to female sterilization. Ensuring quality Family Planning services through updating existing and formulating new standard operating protocols leads to skill enhancement of providers. Government of India published first 'Quality Assurance Manual' for sterilization service in the year 1989. It has been revised time to time with the change in policy and updated to match global standards.

Highlights of the standards for female sterilization^{2,3}

Minilap tubectomy and laparoscopic tubal occlusion, under local anaesthesia are safe; acceptable and simple procedures; highly effective and relatively pain-free; affect only fertility; inexpensive; suitable to be performed as an ambulatory procedure and cause minimal tubal damage in order to facilitate reversibility. Both methods have proven to be equally safe and effective.

Timing of the surgical procedure

Interval sterilization: should be performed within 7 days of the beginning of menstrual period (in the follicular phase of the menstrual cycle) or anytime during the cycle if the woman and the provider are reasonably sure that she is not pregnant.

Post-partum sterilization: should be done within 7 days of delivery.

Sterilization following spontaneous abortion: can be performed concurrently or within seven days of abortion, after excluding infection.

Sterilization following MTP: can be performed immediately after the procedure if the provider has ensured that the abortion is complete and there is no infection and in the next menstrual cycle, if client had undergone medical abortion. Laparoscopic tubal occlusion should not be done concurrently with second-trimester abortion and in the early post-partum period up to 42 days

Concurrent with other Surgery: LSCS, salpingectomy or ovarian cystectomy

Eligibility of clients

Clients should be ever-married. Female clients should be above the age of 22 years and below the age of 49 years. The couple should have at least one child, whose age is above one year. Clients or their spouses/partners must not have undergone sterilization in the past

Clients must be in a sound state of mind, so as to understand the full implications of sterilization. Mentally ill clients must be certified by a psychiatrist and a statement should be given by the legal guardian/spouse regarding the soundness of the client's state of mind.

A relevant medical history, physical examination and laboratory investigations need to be completed to ascertain eligibility for surgery.

Counseling

Client counseling must be of a high standard that includes, among other, steps and approaches, the provision of full and correct information about all available contraceptive methods that will enable clients to make an informed and voluntary decision. Clients should be made to understand what may happen before, during and after the surgery, its side effects and potential complications. Clients should be told that it is a permanent procedure. It is a surgical procedure that has a possibility of complications, including failure, requiring further management. A reversal of the surgery is possible but the reversal involves major surgery and the success of which cannot

be guaranteed. *In the unlikely event of any complication / failure/ death there is a redressal mechanism available in the form of indemnity coverage.*

Client assessment

Client assessment for eligibility to undergo female sterilization is a key factor in minimizing risk of complications and ensuring quality of service delivery. No medical conditions prevent a woman from undergoing female sterilization but may limit when, where or how the female sterilization procedure should be performed as per WHO MEC (2011) Update, which have been adapted by Government of India⁴.

History: This should include demographic information, specific information which should be obtained as part of the medical history including menstrual history, obstetric history, contraceptive history and medical history to screen out the diseases as mentioned under the medical eligibility criteria.

Physical Examination: This should include a general examination, examination of abdomen and pelvis and any other examination as indicated by the client's medical history or general physical examination

Laboratory Examinations: Blood test for haemoglobin, urine examination for sugar and albumin. Pregnancy test is done, if needed. Clients with haemoglobin <7 gm/ dl should not be accepted for sterilization and referred to higher centers for management.

How to reasonably exclude pregnancy

The client is not pregnant, if she has not had intercourse since her last menses or has been correctly and consistently using a reliable contraceptive method; is within the first 7 days post-abortion; is within the first 7 days after the start of her menses; is 4 weeks postpartum or is fulfilling the criteria for LAM (fully breast feeding, less than 6 months postpartum and has had no menstrual bleeding).

Preoperative instructions

Client should preferably trim the pubic and perineal hair. Shaving of pubic hair, if warranted, should be done just prior to surgery. She should bathe and wear clean and loose clothes to the OT and not have a meal on the morning of the surgery (should not take anything orally, not even water, at least 4 hours prior to surgery and any solids, milk or tea at least 6 hours prior to surgery). Instruct her to empty her bowels on the morning of the surgery and empty her bladder before entering the OT. Have a responsible adult accompanying her to take her home after surgery.

Anaesthesia/ Analgesia

General anesthesia for pain management is recommended only in special circumstances and must be used at a facility with the capacity to provide and offer adequate monitoring care for it.

Premedication: Reassurance and proper explanation of the procedure. If needed, preferably tablet alprazolam (0.25 to 0.50 mg) or tablet diazepam (5 to 10 mg) can be given one hour before the operation.

Sedation/Analgesia: The anxiolytic, sedative, light muscle relaxant and amnesic effect produced in the client following administration of sedation allow sterilization procedure to be performed smoothly under local anesthesia. It should be given 30-45 minutes before surgery.

Local anaesthesia: Local anaesthesia is recommended both for minilap tubectomy and laparoscopic tubal occlusion. 1% lignocaine without adrenaline is recommended. The key to safe use of a local anaesthetic is to be sure that it is not injected directly into a vein and to use the lowest effective dose. Skin sensitivity test is not mandatory for lignocaine as it has no established predictive value for anaphylactic reaction. All three layers, namely skin, rectus fascia and peritoneum should be infiltrated with adequate amount of 1% lignocaine; the total dose injected should not exceed 4.5mg/kg BW.

Surgical procedure

Minilaparotomy: Minilap tubectomy is an abdominal surgical approach to reach the fallopian tubes by means of an incision 2-3 cm in length. The incision for this may be transverse or longitudinal. Minilap tubectomy is performed by two approaches. Sub-umbilical approach is appropriate in the immediate postpartum period and within 7 days of childbirth (post-partum sterilization). Supra pubic approach is appropriate for interval minilap tubectomy.

The modified Pomeroy technique is the recommended approach for occluding the fallopian tubes using a square knot with 1-0 chromic catgut. In interval minilap a uterine elevator may be used to bring the fallopian tubes into the operative field to help in visualization of the tubes.

Laparoscopic sterilization: To avoid hypoventilation, the client must not be placed in the Trendelenburg position in excess of 20 degrees. Pneumo-peritoneum should be created with Veress needle. Alternatively, pneumo-peritoneum can be created by directly introducing the trocar, if the surgeon is experienced and confident. Insufflation of abdomen should be done preferably with carbon dioxide. Slow insufflations with graded

insufflator and gradual de-sufflation should be done. Use the high flow switch to introduce carbon dioxide at the rate of 1 litre per minute. Intra-abdominal pressure should not exceed 15 mm of mercury.

The skin incision should not exceed the diameter of the trocar. The trocar is to be angled towards the hollow of the sacrum. The operator must lift the anterior abdominal wall before introducing the trocar. A uterine elevator should be used to visualize the fallopian tube (optional). Tubal occlusion must always be done with Falope rings (no cautery is to be used).

While applying Falope rings precautions should be taken to draw the tube slowly and smoothly into the sleeve of the laparoscope after proper identification (include only the amount of tube necessary to provide adequate occlusion. To prevent injury to the mesosalpinx/tube, avoid pulling up or back on the laparocator. The rings should not be applied in case of thick, oedematous or fixed tubes. In such cases, tubectomy should be done with laparotomy under GA by conventional method. After applying the second ring, the operator should systematically inspect the pelvis to verify that both tubes are now occluded, there is no unusual bleeding and that there is no visceral injury. The surgeon should expel all the gas from the abdominal cavity slowly before removing the trocar.

Monitoring of clients

Preoperatively: Pulse, BP, respiration prior to premedication and thereafter every 10 minutes.

Intra-operatively: Check pulse, respiration and BP every 5 minutes.

Post-operatively: Pulse, respiration, blood pressure and also skin color recorded every 15 minutes for one hour following surgery or longer, if the patient is unstable or not awake.

When to discharge the client

After at least 4 hours of procedure, when the vital signs are stable and the client is fully awake, has passed urine and can talk, drink and walk. The client should be seen and evaluated by the health care provider before discharge and accompanied by a responsible adult. Whenever necessary the client should be kept overnight

at the facility. Analgesics, antibiotics and other medicines may be provided and/or prescribed as required.

Before discharging the client, the staff should ensure that client understands the signs of potential problems (warning signs). She should return to the clinic immediately or seek emergency care if a problem develops.

Warning Signs Following Female Sterilization:

Dizziness with fainting; persistent or increasing abdominal pain; bleeding or fluid oozing from the incision; uterine cramps; incision discomfort; abdominal discomfort; pain in left shoulder and unable to pass urine.

Follow-up of clients

The first follow up contact within 48 hours of discharge is recommended. The next visit should preferably occur on the seventh day after surgery and should include an examination of the operative site and suture removal. Subsequent follow-up visit should be made after either one month or the next menstrual period, whichever is earlier.

Certificate of sterilization

A certificate of sterilization should be issued only after one month or after the first menstrual period, whichever is earlier, by the Medical Officer of the facility.

The standard protocols and guidelines are appropriate for variety of settings and are applicable for most of the clients. Compliance with these guidelines increases adherence to evidence based best practices thereby minimizing the chances of missing critical steps in continuum of care and increases client satisfaction. These guidelines have a legal validity; they can be quoted in the court of law.

Quality Sterilization Services is every Woman's Right and Provider's responsibility.

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*It would be a service to mankind if the pill were available in slot machines
and the cigarette were placed on prescription*
- Malcolm Potts

Standards and Quality Assurance in Sterilization Services - 2014 (2)

Rajesh Kumari Azad

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Member, District Quality Assurance Committee

Quality Assurance (QA) is the cyclic process involving assessment leading to improvement, followed by further assessment and improvement. It is critical to ensure that QA is recognized as an essential element of sterilization services. The elements of “Quality of Care” in the specific area of sterilization services by using a systems approach are – Inputs, Processes and Outcomes.

Inputs include qualified providers, physical infrastructure, supplies and equipment etc.

Eligibility criteria for performing sterilizations:

A - Qualification requirement

- Female sterilization by minilap tubectomy should be performed by a trained MBBS/PG doctor.
- Laparoscopic sterilization for females should be performed by a gynaecologist with DGO/MD/MS qualification or by a surgeon with an MS degree; these doctors should be trained in laparoscopic sterilization.
- Male sterilization procedures both conventional vasectomy and no scalpel vasectomy (NSV) should be performed by a trained MBBS or a PG Doctor.

B - Empanelment of Doctors for performing sterilization

- Each State prepares a district wise list of doctors who are qualified as per qualification requirements.
- Only those doctors whose names appear on the panel are entitled to carry out sterilization procedures in the government and /or government accredited institutions and are covered under indemnity insurance. The panel is updated quarterly.

Processes include technical and interpersonal dimensions. The protocol for the various procedures of counselling, sterilization surgery, anaesthesia, follow up etc are already discussed in the standards of sterilization services.

Outcomes of quality services should be seen from the perspectives of clients, providers and managers. This will result in achieving reproductive intentions, leading to the attainment of the programme goals.

Quality Assurance Management

Monitoring for quality is done at three different levels:-

- At the central level, through proper and well established reporting systems,
- At the state and district levels through Quality Assurance Committees (QACs);
- At the service outlet levels through quality circles

Family Planning Indemnity Scheme (FPIS)

The GOI had introduced the National FP insurance scheme since 25 Nov 2005 which has been modified into FPIS wef 1.4.2013. The objective of FPIS is to indemnify all acceptors of sterilization and also doctors performing sterilization operation in both public and accredited private/ NGO sector Health facility for unlikely events of death/ complication/failure following sterilization operations. So if the doctor is empanelled and the health facility accredited with district health authority for rendering the sterilization services, then they stand indemnified against the above claims and even the legal costs would be borne by the Insurance Company within certain limits.

Sterilization failure

In case of suspected pregnancy after the sterilization procedures, investigation such as urine test for pregnancy, USG & semen analysis (if male client) should be conducted. The facility should report within three months of detection of failure to the District QA Committee along with the claim form by the client and other required documents as given in check list of FPIS manual.

Provision of sterilization services, as per the guidelines and standards results in minimizing complications, reducing failures and ultimately helping in achieving the goal of reducing the unmet needs for contraception, along with a highly satisfied client.

References

- Quality Assurance Manual for Sterilization Services 2014
- Manual for Family Planning Indemnity Scheme 2013

Contraceptive Choices in Reproductive Extremes

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Contraception in Adolescents

In India, premarital sexual experiences in the adolescents is on the rise with a consequent risk of unsafe abortions, unwanted pregnancies, pregnancy associated morbidities and sexually transmitted diseases, thus making adolescent contraception an issue of utmost importance.

Barriers for contraceptive use in adolescents

- Reluctance to acknowledge one's sexual activity
- Difficulty in planning events and activities in advance: living in the moment
- Denial of the problems or consequences surrounding sexual intercourse.
- Access to health care provider or a facility is also a limiting factor
- Lack of confidentiality
- Fear of pelvic examination before contraceptive initiation.
- Lack of awareness and misconceptions regarding contraception
- Concerns of side effects of hormonal contraceptives

Motivating factors for contraceptive use

The sexually active adolescent is more likely to seek contraception if she:

- Perceives pregnancy as a negative outcome
- Has long-term educational goals
- Is older
- Experiences a pregnancy scare or actual pregnancy
- Has family, friends, and/or a clinician who sanction the use of contraception

Adolescents are more likely to use condoms if they understand condoms can prevent HIV/AIDS, if they carry condoms and are not embarrassed to use them, and if they are worried about getting AIDS.

Counselling of adolescents

Comprehensive health care of adolescents should include a confidential sexual history that should be obtained in a safe, nonthreatening environment through open, honest, and non-judgmental communication with assurances of confidentiality. The promotion of healthy and responsible sexual decision-making is the prime

objective of counselling adolescents. **Adolescents should be strongly encouraged to postpone or delay the initiation of sexual activity.** For teenagers who are already engaged in sexual activities, a discussion of contraceptive methods and prevention of STIs is essential. ABC strategy (A- Abstinence, B-Be faithful & C- use contraception/condoms) should be encouraged. Reinforce and support abstinence.

The various areas to be covered during counselling of adolescent include

- Selecting the best method based on effectiveness, frequency of use, and convenience
- Risk of side effects
- Tips on adherence- give contact number of provider to clear any doubt at any time.
- Use of condoms to protect against sexually transmitted infections (STIs)
- Practical suggestions to promote use, such as keeping condoms in a purse
- The availability of and indications for emergency contraception

Contraceptive methods for adolescents

Determinants of adolescent contraception are requirement of double protection: effective protection against unwanted pregnancy and effective protection against sexually transmitted diseases.

Hence the **use of condoms plus one other form of contraception (dual method)** is likely to be the most appropriate regimen.

Oral contraceptives- Common examples of adherence problems with oral contraceptives (OCs) include, forgetting to take the pill, starting the next pack late, using pills sporadically, and not using a backup method. The adolescent should be provided clear verbal and written instructions. Demonstrating the instructions with the actual pill pack (if possible) or a sample pack can also help with compliance and instructions for when she misses pills.

OCs can be started at any time ("Quick Start"), day of the next menstrual period or the Sunday after the onset of the menstrual period ("Sunday start method").

Quick start allows for faster protection from unplanned

pregnancies. Encourage 7 days of back-up contraception such as condom or abstinence until method takes effect. It may improve short-term continuation of combined oral contraceptives and has not been shown to increase unscheduled bleeding.

The non-contraceptive benefits of COCs for the adolescent are improved bone density, treatment of acne, protection against dysmenorrhea, salpingitis, ectopic pregnancy, benign breast disease, iron deficiency, ovarian cancer and endometrial cancer.

The concerns of using COCs in adolescents are:

- Thromboembolism- risk of VTE appears to be related to the dose of estrogen, age, and the type of progestin. The risk of VTE is lower in adolescents than in women older than 39 years. OCs containing LNG is preferred over OCs with third generation progestins.
- PID - OCs may be associated with increased risk of PID but the users have decreased severity of disease.
- Concerns about growth of adolescent- COCs should be avoided till the vertical growth of the adolescent is in progress (until 16 years). Ultra-low dose estrogen (20 mcg) pills may interfere with achieving optimal peak bone mass in young adolescent women.

Extended cycle or continuous pill use- the desire to avoid monthly periods in case of participation in athletic events or summer camps, or general discomfort and “hassle” of monthly periods. A systematic review of continuous use of oral contraceptives in adult women found that other menstrual symptoms, including headaches, genital irritation, tiredness, bloating, and dysmenorrhea also improved with extended cycle pill use¹.

Vaginal ring- the vaginal ring is an attractive option because it only needs to be changed every three weeks. However, use of the vaginal ring requires that the adolescent be comfortable inserting the ring in the vaginal canal. The vaginal ring can be initiated according to the Quick Start method.

Transdermal patch- an attractive option for adolescents, as it does not require daily attention, can be initiated according to the Quick Start method. However, the need for weekly change also may promote decreased adherence. Strategies to promote weekly changes should be reviewed with adolescents using the transdermal patch.

Intrauterine device- The American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) recommend that the intrauterine device (IUD) be considered a first line method (along with the etonogestrel implant) to prevent unintended pregnancy in adolescents; it provides long term, uninterrupted contraception². Parous adolescents

may be better candidates for the IUD than nulliparous adolescents because higher expulsion rates have been reported in nulliparous adolescents. However the three and five year devices have been successfully used in nulliparous adolescents. The risks and benefits of IUD for an adolescent must be determined on a case by case basis.

IUD is an unacceptable method in a woman with pelvic inflammatory disease (PID) or purulent cervicitis currently or in the past three months. The risks outweigh the advantages of inserting an IUD in a woman with multiple partners or a partner with multiple partners. However there is no restriction on IUD placement when there is a past history of PID and no current sexually transmitted infection.

Contraceptive implants- a single rod implant containing the progestin etonogestrel, lasts three years, and is currently not available in India. It provides long term, uninterrupted contraception and pregnancy protection within 24 hours; fertility returns quickly after removal of the implant. Unexpected and prolonged bleeding can be a problem and can trigger request for premature removal.

The Quick Start method is not recommended for the implant (pregnancy needs to be ruled out). One DMPA injection can be prescribed (using the Quick Start method) for sexually active adolescents before insertion of the implant. This approach provides Quick Start hormonal contraception, allows the adolescent to experience and adjust to hormonal contraception, and may prevent premature removal of the implant.

Depot Medroxyprogesterone Acetate- the first shot of DMPA is given during the menstrual period to ensure absence of pregnancy or as the Quick Start method. Adolescents using DMPA should be encouraged to take 1300 mg of elemental calcium and 400 international units vitamin D and to exercise each day. Estrogen supplementation should be considered for girls who are doing well on DMPA and have osteopenia with no contraindications to estrogen.

Condoms - Girls planning to use condoms should receive them before leaving the office or clinic, if possible, to ensure availability and promote adherence.

Emergency contraception- The use of non-abortifacient hormonal medication within 72 hours of unprotected sexual intercourse is very important component of contraceptive counselling in adolescents.

Continuation rates in adolescents

It was observed that continuation rates were greater among adolescents who used long acting reversible contraception (i.e.levonorgestrel intrauterine system, copper intrauterine device, or etonogestrel implant) than other methods (84.7 versus 44 percent)³.

Contraception in perimenopausal women

Fertility declines markedly during perimenopausal age but the risk of unintended pregnancy remains. Contraceptive choice for women over 40 years may be influenced by many factors: frequency of intercourse, natural decline in fertility, sexual problems, and the wish for non-contraceptive benefits, menstrual dysfunction and concurrent medical conditions.

According to WHO, no contraceptive option is contraindicated based on age alone. However, as individuals get older, age may become a more significant risk factor for developing incidental medical conditions that could impact on contraceptive choice.

A clinical history (medical, sexual, reproductive and social) will enable practitioners to assess the risk of STIs, sexual function and medical and social factors that may influence contraceptive use such as frequency of intercourse, change of partner, plans to have children, menstrual dysfunction and lifestyle factors such as smoking.

Long-acting reversible methods of contraception (LARCS)

Intrauterine contraceptive device (IUD)- Cu 380 IUD is a highly effective contraceptive approved by FDA for as long as 10 year of continuous use. IUD can be removed 1 year after cessation of menses. Menstrual bleeding problems are common in women aged over 40 years and also common in users of copper-bearing intrauterine methods. Spotting, heavier or longer periods and pain is common in the first 3-6 months following Cu-IUD insertion. These bleeding patterns are not harmful and usually settle with time; however, women should be advised to seek medical advice to exclude gynaecological pathology and infection if the bleeding problems persist or occur as a new event.

LNG-IUS- 99% effective for as long as 5 yrs. It induces amenorrhea in about 50 % of women. This method may be effective for women with perimenopausal AUB. Women who have their LNG-IUS inserted for contraception at the age of 45 years or over can use the device for 7 years (off licence) or if amenorrhoeic until the menopause, after which the device should be removed.

DMPA injection & Implanon are other options which can be used in perimenopausal women.

Hormonal contraception

COC- Therapy has to be individualized, based on risk factor profile & patient's preference. Healthy nonsmoker, non-diabetic women with controlled BP and not having risk of thromboembolism can use OCP up to 51 yrs of

age. Risk of VTE, Stroke, myocardial infarction, breast & cervical cancer however, is of concern.

World Health Organisation, recommends that women from menarche through 40 years can use COC freely (MEC Category 1), whereas women 40 years and older fall in MEC Category 2⁴.

Other combined hormonal contraceptives (CHC) for perimenopausal women include vaginal ring and transdermal patches. Blood pressure should be checked before advising CHCs, 6 months after initiating and at least annually thereafter. CHC use help to maintain BMD, provides a protective effect against ovarian and endometrial cancer (for 15 years or more after stopping CHC). There may however be a small additional risk of breast cancer with CHC use, which reduces to no risk 10 years after stopping CHC.

Progestin only contraceptive- Progestin only contraceptive has not been associated with a risk for venous thromboembolism, myocardial infarction and stroke but often causes irregular bleeding

Barrier methods of contraception

These are a practical choice for many perimenopausal women whose fertility is on the decline. When used consistently and correctly, male condoms and female condoms are, respectively, up to 98% and 95% effective at preventing pregnancy.

Sterilization

Permanent sterilization is reasonable option for perimenopausal women.

Emergency contraception

Women should be made aware of the different types of emergency contraception available including when they can be used and how they can be accessed. There are no restrictions on the use of emergency contraception (EC) based on age alone.

Stopping contraception

Women using non-hormonal methods of contraception can be advised to stop contraception after 1 year of amenorrhea if aged over 50 years and 2 years if the woman is aged less than 50 years. Women who have a Cu-IUD containing 380 mm² copper, inserted at or over the age of 40 years, can retain the device until the menopause or until contraception is no longer required.

Conclusion

Thus it is seen, that though almost the entire basket of contraceptive choices is available for these special group

of women, it is the sensitive and need based counseling coupled with adequate knowledge of the provider which goes a long way in helping the client to make the right choice.

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Thalassemia

- *The highest prevalence of Thalassemia minor/carrier is seen in communities like Sindhis, Punjabis, Gujaratis, Marwaris, Saraswats and Gaurs. Though with inter caste marriages, this gene has passed into other communities too. A thalassemia screening test would be the only conclusive way to identify a Thalassemia carrier.*
- *3% to 17% of India's population is Thalassemia minor/carrier. There are over 10,000 new Thalassemia major births in India alone and over 100,000 Thalassemia Majors that are taking regular blood transfusions for survival. All of this is preventable - Get Thalassemia screening done of the parents.*

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Medical Eligibility Criteria for Contraceptive Use (WHO, 2015)

Compiled by Jyotsna Suri¹, Rekha Bharti²

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Executive summary of recommendations for the Medical eligibility criteria for contraceptive use (MEC), fifth edition (2015) (For MEC categories refer to page 18).

Recommendations for use of CHC (combined hormone contraception)

- Women from menarche through 40 years- MEC Category 1. Women 40 years and older- MEC Category 2.
- Breastfeeding women, < 6 weeks postpartum- MEC Category 4, ≥ 6 weeks to < 6 months postpartum (primarily breastfeeding)- MEC Category 3 and ≥ 6 months postpartum- MEC Category 2.
- Women without other risk factors for VTE and are < 21 days postpartum- MEC Category 3, are ≥ 21 days to 42 days postpartum- MEC Category 2 and > 42 days postpartum MEC Category 1.
- Women with other risk factors for VTE and are < 21 days postpartum- MEC Category 4, are ≥ 21 days to 42 days postpartum MEC Category 3 and > 42 days postpartum MEC Category 1.
- Women with varicose veins- MEC Category 1, Superficial Venous Thrombosis- MEC Category 2.
- Women with known dyslipidaemias without other known cardiovascular risk factors- MEC Category 2.

Recommendations for progestogen-only contraceptive (POC) and levonorgestrel-releasing intrauterine device (LNG-IUD)

- Breastfeeding women with < 6 weeks postpartum, POP, LNG and ETG implants- MEC Category 2, progestogen-only injectables (POIs) (DMPA or NET-EN)- MEC Category 3. Breastfeeding and ≥ 6 weeks to < 6 months postpartum POPs, POIs, and LNG and ETG implants- MEC Category 1. Breastfeeding women and

≥ 6 months postpartum POPs, POIs, and LNG and ETG implants- MEC Category 1.

LNG-IUD use among breastfeeding women:

- Breastfeeding women < 48 hours postpartum- MEC Category 2, ≥ 48 hours to < 4 weeks postpartum- MEC Category 3 and ≥ 4 weeks postpartum LNG-IUD MEC Category 1, and women with puerperal sepsis MEC Category 4.

Recommendations for use of subcutaneously-administered depot medroxyprogesterone acetate (DMPA-SC)- new method added to the guideline, MEC same as DMPA-IM (intramuscular)

Recommendations for Sino-implant - new method added to the guideline, MEC- same as LNG-IUD

Recommendations for emergency contraceptive pills (ECPs)- ulipristal acetate (UPA) as a new method added to the guideline; use of CYP3A4 inducers and obesity as new conditions for ECP use (discussed in article on Recent Advances in Hormonal Contraceptives, page 14).

Recommendations for use of progesterone-releasing vaginal ring- new method added to the guideline

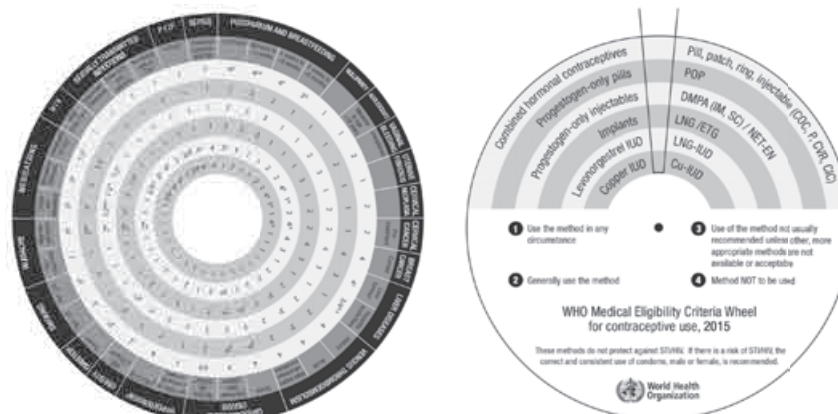
Women who are actively breastfeeding and are ≥ 4 weeks postpartum can use the progesterone-releasing vaginal ring without restrictions (MEC Category 1).

Recommendations for use of hormonal contraception for women at high risk of HIV infection, women living with HIV, and women living with HIV using antiretroviral therapy (ART) and Intrauterine device (IUD) use for women with increased risk of sexually transmitted infections (STIs) (discussed in article on STI and HIV, page 25).

*When the history of civilization is written,
it will be a biological history and Margaret Sanger will be its heroine*
- H.G. Wells, 1935

It is not economical to go to bed early to save the candles if the result is twins
- Chinese Proverb

WHO medical eligibility criteria wheel for contraceptive



The wheel is based on the Medical Eligibility Criteria for Contraceptive Use (MEC), 5th edition, 2015. The wheel includes recommendations on initiating use of six common types of contraceptives and is available at http://www.who.int/reproductivehealth/publications/family_planning/mec-wheel-5th/en/

AOGD Monthly Clinical Meetings

Next AOGD Monthly Clinical Meeting will be on 31st July at Holy Family Hospital and August Monthly Clinical Meeting will be held at AIIMS on 21st August, 2015

FORTHCOMING EVENTS

- **AOGD Endoscopy and Endometriosis Subcommittees** hands on courses in Hysteroscopy Laparoscopy and Vaginal Surgery on 9th, 10th & 11th July, 2015 and 13th & 14th August, 2015 and endometriosis video workshop on 18th July, 2015 & 22nd August, 2015 at Fortis Flt Lt Rajan Dhall Hospital, Vasant Kunj. Dr UP Jha M: 9811029310, Dr Neema Sharma M: 9911057456, Dr Ramandeep M: 9810605842 for registration.
- CME on **“Approach To Female With Urinary Incontinence”** organized by AOGD Urogynaecology Sub-committee at Indraprastha Apollo Hospital on 12th July, 2015.
- CME on **“Opening Minds to the Care of the Fetus”** organised by Army Hospital (R&R) in association with Society of Fetal Medicine under the aegis of AOGD at Ayurvigyan Auditorium R & R Hospital on 19th July, 2015.
- AOGD Outreach activity **“Women’s Comprehensive Health Camp”** organised by Sabharwal’s Clinic in South Delhi on 22nd July, 2015
- CME on **“Fertility-Crossing the Hurdles”** on 26th July, 2015 at Club Patio South City, Gurgaon organized by W. Pratiksha Hospital under agies of AOGD.
- CME on **“Quest for Excellence in Obstetric Skill”** on 8th August, 2015, 10.00am - 4.00pm; Venue: Swaran Jayanti Cafeteria LHMC & SSKH, New Delhi.
- **“22nd Annual Conference of NARCHI Delhi Branch”** on 22nd & 23rd August 2015 at Scope Complex Lodhi Road, Delhi. Theme topics: 1. Medical Disorders in Pregnancy, 2. Quality Maternity Care, 3. Recent Advances in Operative Gynecology, 4. Miscellaneous. PG quiz on “Contraception”. Last Date of Registration & Abstract Submission is 31st July, 2015. For details contact website www.narchidelhi.org Contacts no. - 9868399724, 9868399730
- **“FENIX-2015” - Annual Conference of Delhi Gynaecological Endoscopists Society** with theme Fertility and Beyond: Inception to Xcellence. Department of Obstetrics and Gynaecology, AIIMS, New Delhi is organizing ‘FENIX-2015’, the Annual Conference of Delhi Gynaecological Endoscopists Society from 28th to 30th August 2015, at J L N Auditorium, AIIMS, New Delhi in collaboration with Gynae Endocrine Society of India (GESI).

The highlights of the conference will be

- Live surgeries from 4 Operation theatres relayed in 2 parallel theatres.
- Focussed sessions on Basics and Advanced Infertility
- Live Demonstration of ART techniques
- This conference will focus on the complete spectrum of gynae surgeries; basics for postgraduate students to recent advances for practicing gynaecologists.
- **“Eighteenth PG Practical Course and CME”** to be organized by the Department of Obstetrics and Gynaecology, Maulana Azad Medical College, New Delhi, will be held on 9th, 10th and 11th October, 2015 at MAMC auditorium, Bahadur Shah Zafar Marg, New Delhi. For details please visit MAMC website: www.mamc.ac.in

Ulipristal: New Emergency Contraceptive

Sujata Das

Senior Medical Officer, Department of Obstetrics & Gynaecology, VMMC and Safdarjung Hospital, New Delhi

Ulipristal acetate is the first of a new class of selective progesterone receptor modulators and is indicated for emergency contraception within 120 hours of unprotected coitus or contraceptive failure. The principal effect of ulipristal acetate is to inhibit or delay ovulation. It has a direct inhibitory effect on follicular rupture when administered in follicular phase. In clinical trials a single dose of ulipristal 30 mg is effective in preventing pregnancy. It will be available in India shortly, after the requisite permission from Drug Controller General of India is obtained.

Mechanism of action and administration

Ulipristal is a progesterone receptor modulator and inhibits ovulation. This drug inhibits/ delays ovulation because of its ability to delay the onset of LH surge or postpone LH peak. Ulipristal may be used any time during a menstrual cycle; however it should not be used more than once in the same cycle. A tablet of 30 mg can be given up to 120 hours of unprotected coitus. The dose should be repeated if patient vomits within three hours of its administration. After taking ulipristal, the regular use of contraception must continue.

Interactions with other drugs

Although certain drugs should not be used at all with ulipristal, others may be used with caution. Some drugs which may interact with ulipristal are:

- Azole antifungals (eg- itraconazol, ketoconazole) as they may increase the side effects of this drug
- Barbiturates these are enzyme inducers and may decrease the efficacy of ulipristal
- Digoxin
- Hormonal contraception- these are enzyme inducers and may decrease the effectiveness of ulipristal

Contraindications

- Allergic to any ingredients in ulipristal
- Known or suspected pregnancy
- Attained menopause
- If the patient is already on medication like phenobarbitone, carbamazepine, phenytoin sodium, rifampicin etc.

Side effects of ulipristal

Most of the side effects are mild in nature. Common side effects are:

- Painful menstrual cycles
- irregular periods
- inter menstrual spotting
- tiredness
- headache and dizziness

Few side effects maybe serious and patient may present with pain lower abdomen which is severe in nature and may occur upto 3 weeks of administration. In general the onset of menses is delayed by 4-5 days following treatment.

Conclusion

Although ulipristal is more expensive, it may represent an alternative to patients requesting emergency contraception up to 120 hours of unprotected coitus. Ulipristal provides effective, sustained and well tolerated emergency contraception thereby offering extended treatment window.

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Journal Scan

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A randomised study comparing the effect on ovarian activity of a progestogen-only pill (POP) containing desogestrel and a new POP containing drospirenone in a 24/4 regimen.

Duijkers IJ, Heger-Mahn D, Drouin D, Skouby S. *Eur J Contracept Reprod Health Care*. 2015 Jun 15:1-9. [Epub ahead of print]

Background: Progestogen-only pills (POPs) are safer with respect to cardiovascular risks than contraceptives containing estrogens. Despite the increased contraceptive efficacy of a desogestrel-only pill compared with a traditional POP, POPs are still not widely used due to an unpredictable bleeding pattern. A new POP containing 4 mg drospirenone has been developed with a 24/4 intake regimen which may improve the bleeding pattern.

Objectives: The objectives of this study were to investigate ovulation inhibition with the new drospirenone-only pill in comparison with the desogestrel-only pill and, in addition, to assess the effects on cervical mucus permeability and bleeding. **Methods:** Sixty-four healthy volunteers with proven ovulatory cycles were randomised and treated with either the drospirenone-only or the desogestrel-only pill during two 28-day cycles. Follicular diameter, endometrial thickness, and serum estradiol (E₂) and progesterone concentrations were measured and Hoogland scores were determined. Additionally, cervical mucus scores, bleeding and return of ovulation were assessed.

Results: Both treatments effectively inhibited ovulation. Follicular diameter, E₂ levels and Hoogland scores were equal, demonstrating efficient ovarian suppression. One subject in each group had a Hoogland score of 6, but the criteria for normal luteal activity were not fulfilled. In both groups, ovulation did not occur before day 9 of the post-treatment cycle. Cervical mucus permeability was suppressed in both groups. The median number of bleeding and spotting days was lower in the drospirenone group. **Conclusions:** The new drospirenone-only pill inhibited ovulation as effectively as the desogestrel-only pill despite the 4-day hormone-free interval.

Steroidal contraceptive use is associated with lower bone mineral density in polycystic ovary syndrome

Moran LJ, Thomson RL, Buckley JD, Noakes M, Clifton PM, Norman RJ, Brinkworth GD. *Endocrine*. 2015 May 10. [Epub ahead of print]

Background: Polycystic ovary syndrome (PCOS) is a common condition affecting reproductive-aged women with features including hyperandrogenism and menstrual irregularity frequently treated with hormonal steroidal contraceptives. Women with PCOS appear to have lower bone mineral density (BMD). While steroidal contraceptives may positively affect bone health, their effect on BMD in PCOS is not known.

Objectives: The aim of this study was to assess BMD in women with PCOS according to recent contraceptive use.

Methods: A cross-sectional analysis of 95 premenopausal overweight or obese sedentary women with PCOS [age 29.4 ± 6.4 years, body mass index (BMI) 36.1 ± 5.3 kg/m²] who either recently took steroidal contraceptives (ceased 3 months prior) or were not taking steroidal contraceptives was conducted. Clinical outcomes included BMD, anthropometry, insulin, glucose, reproductive hormones, dietary intake and vitamin use. **Results:** BMD was significantly lower for women who used contraceptives compared to those who did not (mean difference 0.06 g/cm² 95 % confidence interval -0.11, -0.02, p = 0.005). In regression models, lower BMD was independently associated with contraceptive use (β = -0.05, 95 % CI -0.094, -0.002, p = 0.042), higher testosterone (β = -0.03, 95 % CI -0.05, -0.0008, p = 0.043) and lower BMI (β = 0.006, 95 % CI 0.002, 0.01, p = 0.007) (r² = 0.22, p = 0.001 for entire model). **Conclusions:** We report for the first time that overweight and obese women with PCOS with recent steroidal contraceptive use had lower BMD in comparison to non-users independent of factors known to contribute to BMD. Whether this observation is directly related to steroidal contraceptive use or other factors requires further investigation.

I want to tell you a terrific story about oral contraception. I asked this girl to sleep with me and she said "No"

- Woody Allen

Proceedings of Monthly AOGD Clinical Meeting Held at R&R Hospital on 26th June, 2015

Compiled by **Monika Gupta**

Assistant Professor, Obs & Gynae, VMMC & Safdarjung Hospital, New Delhi

Case 1

Primary infertility, female factor - PCOD and male factor - obstructive azoospermia

Lt Col (Dr) Prashant Sharma

26 yrs old lady, married for 07 yrs. A case of Primary infertility. Female factor - PCOS. On evaluation of husband he was found to have azoospermia on semen analysis. Husband's hormonal profile was WNL and semen fructose was found to be positive. Husband was diagnosed with Obstructive Azoospermia. Underwent surgical sperm retrieval (TESE) followed by ICSI and ET. Resulted in a successful ongoing pregnancy.

Case 2

Three unusual complications in OBGY practice

Dr Sunita, Lt Col (Dr) Reema Kumar

Pregnancy with acute abdomen

27 Yr old primigravida Post IVF, twin Pregnancy at 6 Wk POG presented with pain abdomen, of acute onset. Exploratory laparotomy was done which revealed internal herniation of small intestine through mesocolic defect of sigmoid colon with gangrenous entire jejunum and ileum. Excision of gangrenous small intestine with gastro- ileal anastomosis was done. Pt made good recovery and continued the pregnancy and delivered at 34 wks.

Unusual complication of B-Lynch suture

23 yr old primigravida who had severe PPH following normal delivery which was managed medically, but it did not improve and emergency B-Lynch suturing and B/L uterine artery ligation was done. Following the surgery she was treated for sepsis at Rohtak and presented to us on post natal day 33 with symptoms of ileus and sepsis. Exploratory laparotomy revealed complete uterine septic necrosis. Subtotal hysterectomy was done with peritoneal toilet. She recovered gradually.

Intra peritoneal drain site hernia

80 yr old post menopausal lady case of Ca endometrium. Surgical staging done. She presented with features of intermittent intestinal obstruction in post op period. CT Scan was done which showed drain site intestinal hernia. Exploration of hernial site done and reposition of gut was done. Gradually patient improved with passage of flatus and stool and recovered completely.

Case 3

Congenital syphilis

Lt Col Niraj Chourey, Brig S Katpalia

28 yrs old primigravida, booked case, immunized, Blood gp AB +ve, at POG 39 weeks 4 days Reported to LR at 1145hrs on 11/5/15. Patient was 6cm dilated with HS at 0. ARM was done and thin meconium liquor was found. Labour was monitored and progressed satisfactorily She delivered a female baby by vacuum for fetal distress (HR 50 – 60) and poor maternal bearing down. In the past mother had some lesions over hand during 2nd trimester of pregnancy for which biopsy was done- S/o ?? secondary syphilis. *However she was VDRL negative during screening and during 2nd trimester in skin dept. Found to be VDRL (+) with TPHA (+) after delivery and treated accordingly by dermatologist BHDC.)* Female preterm (35 weeks) baby brought to NICU in view of prematurity, low birth weight with decreased movements of all four limbs. The baby was found to have decreased activity, global hypotonia and excessive crying on nursing. On investigation mother & father both were found to be VDRL (+). MRI spine done to R/o birth trauma to spine was found to be normal. Serial X rays done were S/O severe periosteal reaction involving ends of long bones. Inj Benzathine penicillin(stat dose) was given. Baby responded to treatment, tone / activity of all four limbs improved, (pseudoparalysis recovery). Presently baby is accepting feeds well, gaining wt, urine/ stool output- adequate, and moving all four limbs.

A crying baby is the best form of birth control - Carole Tabron

We want far better reasons for having children than not knowing how to prevent them - Dora Winifred Black Russell

Brain Teasers

Dr Monika Gupta

Assistant Professor

Dept. of Obs & Gynae, VMMC & Safdarjung Hospital, New Delhi

We have been receiving an overwhelming appreciation for the bulletin from all our members. This newly introduced section of Brain-teasers has received a special mention. Our members' participation in form of response to the Quiz will be a value addition to our endeavours. We have a **lucky dip** for all the right answers received and winner's name will be announced in the next monthly AOGD clinical meeting.

1. According to UNAIDS and WHO, women with HIV infection stage 3 or 4 can use all of the following except:
 - a. Combined Oral Contraceptive Pills
 - b. LNG implants
 - c. Copper containing IUD
 - d. Contraceptive vaginal Ring
2. Which of the following type of Combined oral contraceptive pills is 'Qlaira'
 - a. Monophasic pill
 - b. Biphasic pill
 - c. Triphasic pill
 - d. Four phasic pill
3. Which of the following is not true regarding Ulipristal:
 - a. Progesterone receptor modulator
 - b. Can be used as category 1 ECP for women who are breastfeeding
 - c. Can be given upto 5 days of unprotected intercourse
 - d. Cannot be used more than once in same cycle
4. According to Medical Eligibility Criteria 2015, females who are < 6 weeks postpartum fall in which of the following category for POP usage
 - a. Category 1
 - b. Category 2
 - c. Category 3
 - d. Category 4
5. All of the following is true regarding 'Lybrel' except:
 - a. 84 active pills + 7 nonhormonal pills
 - b. Decreased incidence of pelvic pain, mastalgia
 - c. Improved control over endometriosis and PCOD
 - d. Long term safety not known
6. Which of the following is true about 'Nexplanon' implant:
 - a. Contains 52mg of Etonogestrel
 - b. Licensed for use upto two years
 - c. Can be detected by X-ray
 - d. Does not have side effect of irregular bleeding for 3-6 months.
7. As per directorate of Family Welfare under Ministry of Health and Family Welfare, 11th July to 24th July is observed as
 - a. Jansankhya Sthirta Phakhwada
 - b. Dampati Sampark Pakhwada
 - c. Beti Bachao Pakhwada
 - d. Swastha Pariwar Pakhwada
8. Depot Medroxy Progesterone Acetate is contraindicated in all of the following except:
 - a. High blood pressure $\geq 160/100$
 - b. Migraine with aura at any age
 - c. Breastfeeding female >6 weeks postpartum
 - d. Past history of breast cancer
9. Government of India's new strategy of RMNCH+A encompasses all of the following except
 - a. Maternal and Child Health
 - b. Geriatric Health
 - c. Adolescent Health
 - d. Family planning
10. According to the national guidelines for Sterilization services 2014, which of the is not a standard for female sterilization:
 - a. Interval Sterilization should be done within 10 days of beginning of menstrual period
 - b. Post-partum sterilization should be done within 7 days of delivery
 - c. Laparoscopic tubal occlusion should not be done concurrently with second-trimester abortion.
 - d. Female client should be above 22 years and below the age of 49 years

Answers to quiz 2: 1. b; 2. c; 3. a; 4. b; 5. c; 6. d; 7. a; 8. c; 9. b; 10. b

Winner of the Quiz 2: Dr Monika Sharma

Uday Park, New Delhi. monikanavneetam@yahoo.co.in



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Dr Sweta Gupta (swetagupta06@yahoo.com / 8130140007)
Dr Puneet Kochhar (drpuneet.k20@gmail.com / 9953001628)

Registration Guidelines (Online registration available on website)

- **Eligibility Criteria: Atleast 70% pass marks for screening test before the online lessons. Only those who pass the screening test can register**
- Bank Transfer or Demand Draft must be made in favour of "RCOG NZ 2012 Plus" payable at New Delhi. (cheques not accepted).
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