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Update on contraception – 2

In Part 1 of this Update, the selection and commencement of a contraceptive method was discussed. This Part considers the issues related to contraception for women over 40 years in age and advice on when and how to stop contraception when nearing the menopause.

Contraception for women aged over 40 years

> 44-year-old Mrs Serasingha is a teacher with a 19-year-old daughter and a 16 year old son. Her husband, aged 46 years, is a telecommunication engineer. She used Depot Medroxy Progesterone Acetate (DMPA) for contraception after the birth of her son for a period of 3 years. She discontinued it as she found herself gaining weight. Since then she has been relying on the method of safe period. Recently one of her colleagues informed of a failure she had experienced with this method. She and her husband decided to seek advice from the family doctor regarding contraception, as they wish to avoid an unplanned pregnancy. How would you, as the doctor, advise and help them with their contraceptive requirements.

Providing contraception for women over the age of 40 years is a challenge because of some special issues. These include menstrual irregularities, concurrent medical conditions and the increasing risk of malignancy which occur in a background of reducing fertility, altered frequency of intercourse and serious social as well as medical consequences of an unplanned pregnancy. Since a proportion of these women will be in the perimenopause or climacteric, when and how to stop contraception is another important issue.

These women need to be specifically made aware that a spontaneous pregnancy may occur, even though fertility naturally declines after the age of 40 years. Effective contraception is therefore a necessity until menopause has occurred ensuring that anovulation has been established. The association of chromosomal abnormalities and medical complications such as diabetes mellitus and hypertension in pregnant women of this age group, result in increased maternal and fetal morbidity and mortality. In addition the possible serious social consequences of a pregnancy at this age make it mandatory that very effective contraception is provided for these women.

Advanced age alone is not a contraindication for the use of a contraceptive method. The advantages and disadvantages of each method should be matched against each other in the discussion with the client so as to enable her to make an informed choice.

The combined oral contraceptive pill (COC) is appropriate for women over the age of 40 years, provided specific risk factors have been excluded. The advantages of using COC by these women include a reduction in endometrial, ovarian and colorectal cancer, reduction in menstrual irregularities, bleeding and pain, reduction in ovarian cyst, pelvic inflammatory disease, endometriosis and a possible increase in bone mineral density and decrease in hot flushes. However cardiovascular disease such as ischaemic heart disease, venous thrombo-embolism, and hypertension, stroke, migraine with aura, diabetes with complications, breast cancer and smoking are considered as risk factors for complication for the COC user. The risk of breast cancer associated with the use of COC after the age of 40 years appears to be negligible and disappears 10 years after stopping the pill. There appears to be an increased risk of cervical cancer when COC is used for more than 5 years and therefore these women should be encouraged to participate in cervical screening programmes [1].

Most data on the use of progestogen only contraceptives (POC) relate to the pill and injectables. However it is likely to be applicable for the implants and levonorgestral intrauterine system (LNG-IUS) as well. The limited data available has not shown any associated risk of cardiovascular disease or breast cancer with the use of POC. However in view of the limited evidence available the use of DMPA is not advised in the presence of ischaemic heart disease, stroke, migraine with aura, diabetes and hypertension with complication and breast cancer. The use of POC reduces the bone mineral density which recovers after its discontinuation. Irregular bleeding is a common problem in the women over the age of 40 years. It needs to be distinguished from the side effect of POC, which also needs to be differentiated from that due to an underlying pathology. On the other hand, the amenorrhoea that commonly occurs following the long term use of POC is helpful in the prevention and control of menorrhagia, irregular bleeding and endometriosis.

Globally, sterilization is the commonest used method of contraception among couples in this age group of over 40 years. Male sterilization has a lower failure rate and lesser procedure-related risk than female sterilization. The decision regarding sterilization should be preceded by consideration of the benefits of a permanent method of

contraception during the last few years of reproductive life as against the surgical consequences of providing it.

Copper Intra Uterine Device (IUD) has the advantage of being able to provide long term effective contraception for at least 10 years with minimal client compliance and devoid of risk of cardiovascular disease or malignancy. The Levonorgestral intra uterine system (LNG-IUS) in spite of its shorter duration of action and increased cost has a benefit by its local action as it helps in treating menstrual irregularities and heavy bleeding commonly seen in this age group.

44-year-old Mrs Serasingha requires effective contraception for about 6 years. As discussed above Cu IUD requiring minimal client compliance will provide contraception for the total period and may be offered as the first option. However sexually transmitted infection and uterine abnormalities will need exclusion prior to its use. If menstrual changes commonly seen at this age pose a problem, the LNG – IUD can be considered. Sterilisation should also be given as an option while highlighting its surgical nature. In view of her previous experience hormonal contraception may be considered as the last option.

When and how to stop contraception at menopause

As mentioned previously a woman who is sexually active if using a temporary method of contraception should only stop it when she ceases to ovulate.

It is generally accepted that a woman is unlikely to ovulate if she is not on hormonal contraceptives:

a) If she is more than 50 years of age after one year of amenorrhoea

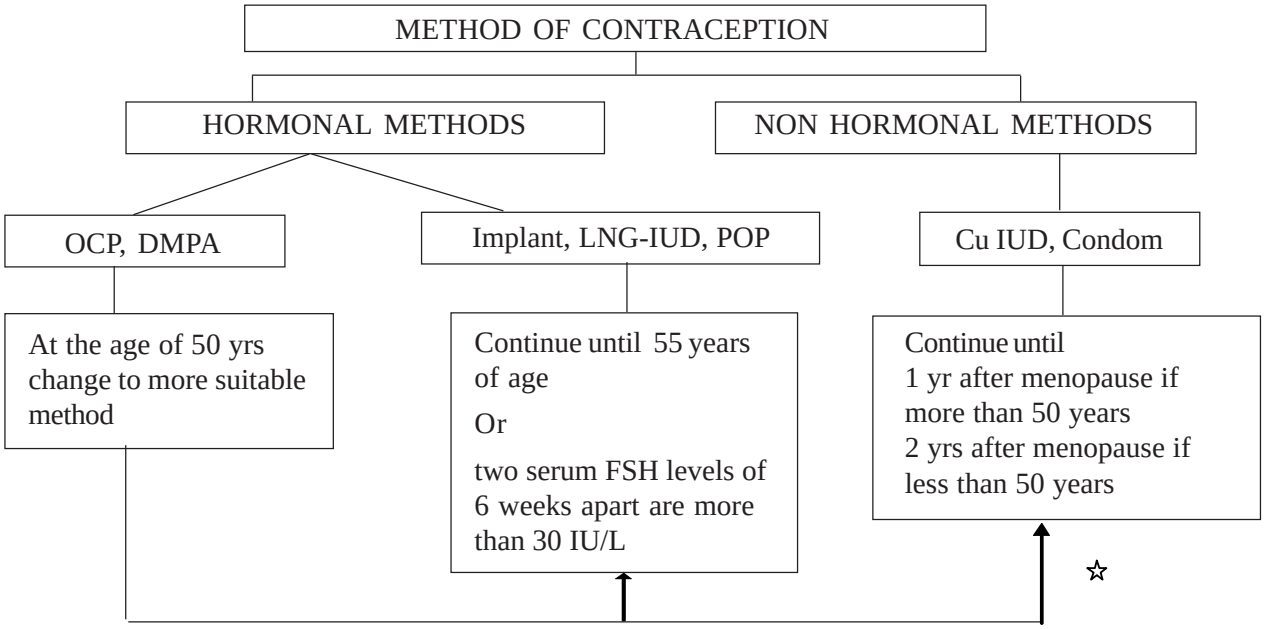
b) If she is less than 50 years of age after two years of amenorrhoea

Therefore any non hormonal methods of contraception could be stopped at the above timings. However if it is to be discontinued before that time an alternative method should be recommended.

Progestogen only contraceptives will often induce amenorrhoea. This is due to the action of progestogens on the endometrium and is not due to ovarian failure. Combined oral contraceptives may cause withdrawal bleeding even when the ovaries have failed. For these two reasons amenorrhoea cannot be used as an indicator of ovarian failure in women using hormonal contraceptives. Therefore these women need to continue contraception until they reach the age of 55 years after which they can be considered unlikely to ovulate (1).

Two serum follicular stimulating hormone (FSH) levels done 6 weeks apart, if found to be more than 30IU/L, also denote cessation of ovulation. LH increases after menopause due to the reduction in oestradiol levels and its negative feedback on the pituitary. Assessment of Serum FSH levels is unreliable in women using the COC even if measured in the pill free interval. However this should not pose a clinical problem as COC and DMPA are inappropriate for use after the age of 50 years and should be changed to other suitable methods.

ADVISE ON STOPPING CONTRACEPTION AT MENOPAUSE



If changing from DMPA to a non-hormonal method, wait for 2 years of amenorrhoea, even if the woman is more than 50 years of age as the initial period of amenorrhoea could be due to DMPA

Providing contraception for women with medical disorders

Often women with acute, sub-acute and chronic medical disorders seek contraception. Since some of these medical disorders increase maternal and fetal morbidity and mortality, it is very important that they effectively avoid pregnancy. Therefore given below are principles of contraceptive use in women with medical disorders, a brief discussion of contraception in some common and important medical conditions and the use of the medical eligibility criteria wheel. The subsequent account should be read along with the use of the medical eligibility criteria wheel.

When providing contraception for women with medical disorders, three important aspects need consideration.

a) The level of contraceptive efficacy required: the risk of morbidity and mortality associated with a pregnancy in the presence of a given medical condition determines the contraceptive efficacy required. E.g., for a woman with pulmonary hypertension, a contraceptive method with highest efficacy is required.

b) Risk involving the use of the contraceptive method. E.g., oestrogen containing contraceptives are best avoided with a history of Deep Vein Thrombosis. The WHO medical eligibility criteria deal with this aspect.

c) Client's choice and compliance. E.g., a woman with psychiatric disease who may find it difficult to take contraceptives regularly is best served with an IUD or implant. When a woman is provided with a contraceptive of her choice, it will increase the chance of continuation of the method.

A normo-glycaemic woman with a history of gestational diabetes may use any contraceptive method without restriction. For a diabetic woman who is otherwise healthy with no complications, the IUD is category 1 and all other methods are category 2. (For categories of WHO medical eligibility criteria refer to contraceptive update in the previous issue of *CMJ*) For a diabetic woman with complications or with other multiple risk factors (e.g., hypertension, older age and smoking) Cu IUD is in category 1 while the Implant, LNG-IUD and POP are category 2 and COC along with DMPA, are category 3/4 [2].

In women with hypertension, Cu IUD is in category 1 as it has no effect on hypertension or its complications. Oestrogen containing contraceptives are best avoided and fall to category 3/4. If the blood pressure (BP) is below 160/100 Implant, POP and LNG-IUD is category 1 and DMPA is category 2. If the BP is 160/100 or above, if there is vascular disease or in the presence of multiple other risk factors Implant, LNG - IUD, POP are category 2 DMPA category 3 COC category 4 [2].

In women with valvular heart disease, the Implant, DMPA and the POP can be used without any restriction (Category 1). Progestogens present in these are free of thrombogenic effects in the doses used. However the oestrogen in the COC makes it thrombogenic and therefore unsuitable in valvular heart disease except in very minor valve lesions such as mitral valve prolapse with no regurgitation and simple congenital lesions successfully repaired in childhood. CuT and LNG-IUD can be used unless there is a high risk for endocarditis or pulmonary vascular disease [2, 3].

Barrier methods such as male and female condoms can be used in the presence of any medical disorder. However, the high failure rate in the manner commonly used should always be kept in mind. Emergency contraception too can be used by women with most medical disorders, but should be followed by regular contraception. Sterilisation per se is not contraindicated by any medical disorder. Attention should be paid, however, to the risks involved in providing anaesthesia during surgery, as well as the permanent nature of the procedure.

Use of the WHO medical eligibility criteria wheel

A common medical barrier which prevents the provision of contraceptive services is the lack of knowledge regarding the safety of using various contraceptive methods in a given medical disorder. Therefore the WHO has done a risk assessment and categorized all contraceptive methods for a wide variety of medical disorders into four categories. The comprehensive updated version of this information is available at the WHO web site under the heading of medical eligibility criteria. The WHO has also produced a user friendly wheel containing most of the common medical conditions, an adapted version of which has been made by the Family Health Bureau for Sri Lanka. Attached to this issue of the *CMJ* is a copy of this wheel for your personal use. Given below is a case scenario which illustrates the use of this wheel in selecting a contraceptive method for a woman with medical disorders.

Mrs. HKL is 34 years old. Her husband Mr. SRL is a healthy 36-year-old accountant. Her first two pregnancies were complicated by hypertension of a moderate level and she underwent caesarean sections on both occasions. They have 8 year old daughter and a 3 year old son. Her blood pressure at present is 160/100 mm Hg. She seeks contraceptive advice. How would you as a service provider manage this couple's contraceptive requirement?

As discussed in the previous issue the first step would be to inquire about their requirement. Do they want a permanent, temporary short term or temporary long term contraception?

Since the two previous pregnancies of Mrs HKL were complicated by hypertension they feel that they would like to avoid another pregnancy at present. However they wish to keep their options open for further pregnancies if the need arises.

The next step would be to list the contraceptive methods for which they are eligible and discuss the advantages and disadvantages of each method. This would enable them to make a proper informed choice.

The wheel on medical eligibility criteria for contraceptive use helps the service provider to list the eligible methods for a variety of medical disorders.

Both chronic hypertension and the two previous caesarean sections are important aspects that need consideration when selecting a contraceptive method for Mrs. HKL.

The wheel allows us to categorize the methods available for Mrs HKL with a BP of 160/100. Accordingly Cu IUD can be used without any restriction (category 1). Implants and the progesterone only pill should be used under supervision (category 2). DMPA should not be used unless there is no other acceptable method (category 3). Combined oral contraceptive pill should not be used (category 4). Therefore Cu IUD is the preferred choice.

The next issue to be considered is the suitability of the Cu IUD in relation to a history of previous caesarean sections. One or more previous caesarean sections do not restrict the client from using any contraceptive method (category 1). However since the uterine scar forms a relatively weak area the IUD needs to be inserted by an experienced service provider with meticulous attention to steps which prevent perforation. (Await important steps in IUD insertion in this series)

References

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