CONTRACEPTION FOR WOMEN OVER THE AGE OF 40

The Faculty of Sexual and Reproductive Healthcare has recently published new guidance on contraception for women over the age of 40. Dr Jane Dickson looks at the implications for general practice and prescribing

Dr Jane Dickson
Consultant in Sexual and Reproductive Healthcare Contraception, Sexual Health and Community Gynaecology Oxleas NHS Foundation Trust

Providing contraception to the 'older' woman can have its challenges and pitfalls. The Faculty of Sexual and Reproductive Healthcare has recently produced an updated guideline on 'Contraception for women over 40',[1] which highlights the important issues when it comes to prescribing for this group of women. This article aims to review and summarise the key messages for this guidance.

What are the important issues when prescribing contraception to over 40s?

- Perceptions of fertility
- Increased likelihood of pregnancy complications
- Medical contraindications to contraception
- Increased prevalence of sexually transmitted infections in this age group
- Timing of the menopause and when contraception can be safely discontinued.

SCENARIO

A 52-year-old woman has had a Mirena coil for 7 years. She has no periods and has just started a new sexual relationship. What should she be advised about contraception?

Background

A woman is born with a finite number of oocytes. Every ovulation results in a fall in this number, meaning fertility falls with increasing age. Women are increasingly delaying the onset of childbearing and one of the most important messages that primary care clinicians can promote is a need for understanding of the 'biological clock'.

When women present for contraception, it is important to explore fertility plans as an essential health education opportunity. Conversely, many women stop using contraception before they are menopausal as they mistakenly believe that they are infertile. Women in this group have one of the highest abortion rates, with nearly 30% of pregnancies resulting in therapeutic abortion.[2] It is therefore important to ensure women have their contraceptive options discussed.

What are the risks of pregnancy for older women?

Pregnancy in women over 40 has a higher rate of adverse maternal and neonatal outcomes. In terms of women leaving it later to plan pregnancy, perhaps one of the most distressing consequences is the increased miscarriage rate – women over the age of 40 are two times more likely to have a miscarriage that younger women[3] and women over the age of 45 have a miscarriage rate over 50%.[4] Women over the age of 40 are approximately three times more likely to have an ectopic pregnancy.[5]

There are risks of on-going pregnancy also, with age over 40 leading to increases in:

- Maternal mortality (risk in women >40 is three times women age 20-24)[6]
- Post-partum haemorrhage
- Placenta praevia
- Diabetes
- Pregnancy induced hypertension
- Caesarean section.

For the neonate there is increased risk of:

- Stillbirth
- Perinatal mortality
- Preterm delivery
- Congenital abnormalities e.g. Down syndrome.

These additional risks mean that the use of contraception is particularly beneficial when pregnancy is not planned.

What guides the use of contraception in women over 40?

The UK Medical Eligibility Criteria (UKMEC) guide the use of contraceptive methods in accordance with medical safety criteria and risk factors.[7] No contraceptive method is **absolutely contraindicated** by a criterion of age alone. However, certain risk factors and medical conditions become more prevalent in older women and the co-existence of these co-morbidities will guide suitability for different contraceptive methods.

Conditions that will have a particular impact on contraceptive prescribing include:

1. Risk of cardiovascular disease
2. Obesity
3. Risk of venous thrombo-embolism(VTE)
4. Risk of malignancy, particularly breast, ovary and endometrium
5. Risk of osteoporosis
6. Bleeding abnormalities, e.g. heavy menstrual bleeding, adenomyosis
7. Onset of the menopause.

Historically, permanent methods of contraception, e.g. male and female sterilisation, have been popular with the over 40s[8] yet, increasingly, we are seeing reduced access and funding to these methods. There are many additional considerations such as the safety, reliability and non-contraceptive benefits of Long Acting Reversible Contraception (LARC), and also hormonal contraception may have particular advantages in the menopausal transition. Each of the main methods is now reviewed in turn with regard to use in the over 40s.

Combined Hormonal Contraception (CHC)[1,9]

As long as there are no other risk factors (e.g. smoking, obesity and other risk factors for CVD/VTE), CHC i.e. combined oral contraception (COC), the combined transdermal patch (Evra), and the combined vaginal ring (Nuvaring), can be continued until 50 years of age. At 50, it is considered that the risks of continuing to prescribe CHC for contraception alone outweigh the benefits and the method should be changed.

When using COC in the over 40s, a preparation containing 30µg ethinyl estradiol or less should be used, with levonorgestrel or norethisterone, as these

pills have the least VTE risk. Lower estrogen doses have lower cardiovascular and stroke risk. There are now CHC available with natural estradiol valerate, e.g. Zoely and Qlaira, but there is still no safety data to demonstrate that these preparations are superior.

CHC can be particularly useful in the perimenopause, where it often provides similar benefits to hormone replacement therapy (HRT), and can sometimes be used as alternative where HRT is not acceptable or for patient preference. Also, CHC is recognised as one of the medical treatments for heavy menstrual bleeding[10] and dysmenorrhoea. For these indications, it may be beneficial to take the COC either continuously or in a tailored manner (i.e. to take continuously until there is bleeding for 3 days and then have a 4-7 day pill-free interval). This way of prescribing the pill also improves efficacy and it is acceptable for GPs to advise patients to take it in this way. Other potential advantages of CHC are protection against osteoporosis, ovarian cancer and endometrial cancer. There is conflicting evidence about a link with developing breast cancer and a small risk of developing cervical cancer (but this risk disappears after 10 years of stopping CHC).[9]

The main risks of CHC are those of increased risk of VTE (the risk of which independently increases with age), cardiovascular disease and stroke. For these reasons, it is important to consider other risk factors for these conditions when prescribing CHC e.g. smoking (CHC should not be prescribed to smokers >35 years), obesity, diabetes, hypertension and hyperlipidaemia.

Progesterone only pills (POP)[1,11]

There are two groups of POPs, those containing desogestrel (DSG), e.g. Cerazette, and those containing the conventional progestogens, i.e. norethisterone or levonorgestrel. DSG pills are anovulant, so generally have higher efficacy, but in the over 40s fertility is naturally falling so traditional POPs have a good role to play.

POP has no link with VTE, CVD, stroke or breast cancer, and can be used safely until 55 years. The main disadvantage is that they may be associated with irregular bleeding and this more frequently requires investigation in older women due to the risk of gynaecological pathology.

Depot progesterone injections[1,12]

There are two depot medroxyprogesterone acetate (DMPA) injections available – Depo-Provera (intramuscular) and Sayana Press (subcutaneous). Previous guidance was to stop the injection at 45 years, but the new guidance states that it can now be continued to 50 years. It can potentially be continued beyond this as long as a woman has full understanding of the potential risks of continuation.

The main risks related to DMPA are due to relative hypo-oestrogenic effects. This may result in reduced bone mineral density (BMD), so it should be avoided when there are risk factors for osteoporosis e.g. smoking, low body mass index, steroid use, lack of weight bearing exercise. Evidence suggests that the initial loss of BMD is not made worse by the menopause.[13] DMPA often results in amenorrhoea, which may be useful for managing menstrual problems, however, it is not licensed to be the progestogenic component of HRT.

Contraceptive implant[1,14]

The contraceptive implant may be used safely in older women with no increased risk of VTE, CVA or CVD. It should be changed every three years and can be used until the age of 55 years. Sometimes, the implant can lead to irregular bleeding, but on other occasions it may be useful to help with menstrual symptoms. It can be used as contraception whilst using hormone replacement therapy but it is not licensed as the progestogenic component for HRT.

Intrauterine device (IUD)[1,15]

Any copper containing IUD fitted after the age of 40 years can be kept as contraception until it is no longer required. This is one year after the menopause if 50 years or more, or 2 years after the menopause if <50 Years. Heavy menstrual bleeding often becomes more problematic for women in their forties, so this method would not be ideal in these cases.

Intrauterine system (IUS)[1,15]

There are currently three levonorgestrel (LNG) containing IUSs available.

These are:

- Mirena – 52mg LNG (licensed for contraception (5yrs), heavy menstrual bleeding (5yrs) and endometrial protection (4 year licence, but FSRH supports use for 5 years))
- Levosert – 52mg LNG (licensed for 3 years for contraception and heavy menstrual bleeding) identical hormone content to Mirena, but not yet licenced for the same indications/length of time
- Jaydess – 13.5mg LNG (licensed for 3 years for contraception). This has a narrower insertion tube so may be easier to fit where the guage of the Mirena inserter is too wide.

The FSRH Guidance states that any Mirena fitted after 45 years can remain in place up to the age of 55 years, if being used for contraception.[1] Mirena should be replaced every 5 years if being used as endometrial protection, e.g. if part of a HRT regime. The 52mg LNG IUS is the most effective medical treatment for heavy menstrual bleeding[16] and is also helpful for endometriosis, dysmenorrhoea and adenomyosis. If it is ONLY being used for these indications, it can remain in situ for as long as it is helpful in managing these symptoms. There is some

evidence that the IUS may be protective against endometrial and ovarian cancer.[17]

If an IUS is being inserted for bleeding problems in the over 40s, it may be particularly important to perform investigations prior to insertion, as pathology is more prevalent in this group of women.[9] This may include a full blood count, ultrasound scan and endometrial biopsy. The NICE guidance on heavy menstrual bleeding recommends an endometrial biopsy when endometrial cancer of hyperplasia need to be excluded e.g. persistent intermenstrual bleeding, treatment failure or ineffective treatment. However, this guidance is currently under review. A further point that the FSRH guidance raises is that it may be difficult to insert or remove an IUS in women who have undergone endometrial ablation.

Stopping contraception

Contraception can be stopped following the menopause. The menopause is a retrospective diagnosis made after 1 year of amenorrhoea. The NICE menopause guidance[18] does not routinely recommend the use of hormone measurement to diagnose the menopause, but the hormone level, which could potentially be used, is FSH. A measure of >30 IU/L indicates ovarian insufficiency but in the perimenopause the level can fluctuate widely so a reading of one measurement should not be relied upon. In women under 50, 2 x FSH readings of >30IU/L more than 6 weeks apart must be taken before menopause can be assumed. In women over 50, who are using progestogen based contraception, a one off reading of FSH can be relied upon. If this reading is >30IU/L, contraception should be used for one further year. If the reading is <30IU/L the test should repeated a year later. This is not a reliable test if women are using CHC or HRT. Women using depot or CHC should be advised to change to a different method of contraception at 50 years.

All women can be advised that contraception can be stopped at 55 years, as it is felt that spontaneous contraception is extremely unlikely even if the woman is still menstruating. Any IUD fitted after 40 can be left until 55 years, and Mirena fitted after 45 years can be left until 55 years. However, the devices should definitely be removed at this point, as otherwise there is potential that these may be a focus for infection.

Using HRT and contraception

As women enter the perimenopause and menopause, they may use HRT for control of menopausal symptoms. Despite often containing progestogen, HRT cannot be assumed as being contraceptive. One exception to this is when the IUS is being used as endometrial protection as part of a HRT regime, as it also continues to be contraceptive. Women using sequential HRT should also be advised to use contraception, and all progesterone methods can be used for this purpose alongside the HRT. When women are using continuous combined HRT , this can be assumed to be contraceptive as a constant daily dose of progestogen is administered. There is no scientific evidence for this but it can be assumed that when a woman is stable on 'no bleed' HRT she is sufficiently menopausal for contraceptive benefit to be assumed.

All women can be advised that contraception can be stopped at 55 years

And finally, 'the trouble with sex'

Assessing sexual health involves more that an assessment of fertility and contraceptive needs. Rates of sexually transmitted infections (STIs) have been increasing in older women. This is partly due to the rise of new sexual relationships via internet and 'app' dating, and the fact that these women are less likely to use condoms. This may be because of lack of awareness of the prevalence of STIs and also that pregnancy is perceived to be low risk (or 'no risk' because of sterilisation). It is therefore important that health professionals discuss risk of infections and also enquire about sexual dysfunction, which is also more prevalent in this age group.

SCENARIO

A 52-year-old woman has had a Mirena for 7 years. She has no periods and has just started a new sexual relationship. What should she be advised about contraception?

As the Mirena was fitted at 45 years and it is only being used for contraception, this would be reliable contraception until the woman is 55 years old. She could have an FSH level taken. If this is >30IU/L she should keep the IUS for one further year and then it can be removed. If it is <30IU/L, this should be repeated in a year's time. She should be advised about the prevalence of sexually transmitted infections and the need to use barrier contraception to protect against infections unless her and her partner have had negative sexual health screenings.

References

References available online at www.bjfm.co.uk