Premature ovarian failure

This information sheet has been given to you to help answer some of the questions you may have about premature ovarian failure. If you have any further questions, please speak to a doctor or nurse in the clinic.

What is premature ovarian failure?
Premature ovarian failure is a loss of ovarian function before the age of 45. Other terms sometimes used to describe the condition are ‘primary ovarian insufficiency’ and ‘premature menopause’.

What do the ovaries normally do?
The ovaries produce hormones called oestrogen and progesterone in response to other hormones (follicle stimulating hormone (FSH) and luteinising hormone (LH)) which are made in a part of the brain called the pituitary gland. All these hormones interact as part of the monthly menstrual cycle which results in the development of an egg in one of the ovaries.

In premature ovarian failure, the ovaries stop producing normal levels of oestrogen and may not produce eggs.

What are the signs and symptoms?
Periods may become infrequent or stop. There may be other symptoms such as:

- hot flushes
- night sweats
- palpitations
- decreased energy levels
- lack of concentration
- poor sleep
- lack of interest in sex
- vaginal dryness
- painful intercourse.

How common is premature ovarian failure?
It affects about one in 100 women before the age of 40 and five in 100 women before the age of 45.
Why does premature ovarian failure happen?
Premature ovarian failure can be caused by chemotherapy or radiotherapy, or if the ovaries are removed during an operation. It can occasionally be due to chromosome or gene problems or associated with autoimmune diseases such as diabetes or thyroid disease. However, most of the time, no cause is found. This is known as idiopathic premature ovarian failure.

How is premature ovarian failure diagnosed?
Women with premature ovarian failure usually have raised FSH levels and low levels of oestradiol (oestrogen). This is because in premature ovarian failure the ovaries do not produce normal levels of oestradiol so the pituitary reacts by making more FSH to try to stimulate the ovaries to produce oestradiol. Your FSH and oestradiol levels will be measured by a blood test.

If you are having periods, it is very important that the blood test is done at the correct time in the cycle (the beginning – day 2 to 4 of your period) because FSH goes up later on in a normal cycle. If you are not having periods, you can have the test on any day. It is also important that the blood test is performed twice, at least four weeks apart, to confirm the diagnosis.

Do I need any more tests?
You will also be offered a blood test to check for diabetes and thyroid problems. This is because premature ovarian failure is sometimes associated with these conditions. If you are under 35 you may be offered a blood test to check your chromosomes. Chromosomes are found in every cell in the body and contain genetic information. Very rarely, premature ovarian failure can be caused by a problem with the chromosomes.

You will be offered a painless x-ray bone scan (known as a DXA), which checks for bone density. This is done because a low level of oestrogen can cause osteoporosis (thinning of the bones).

Is idiopathic premature ovarian failure the same as the normal menopause?
No, it is not the same as the menopause which occurs at an average age of 51 in the UK. The normal menopause occurs when there are no more follicles (developing eggs) in the ovaries and it is irreversible.

In premature ovarian failure, the function of the ovaries can return intermittently and some women may even start to have periods or become pregnant many years later, although this is rare.

What effect will premature ovarian failure have on my long-term health?
The low oestrogen level in premature ovarian failure can cause osteoporosis, which can lead to fractures. It probably also causes an increase in cardiovascular risk (the risk of having a heart attack or stroke), which is also influenced by many other things, for example smoking, diet, exercise and weight.
Premature ovarian failure can be a very difficult diagnosis to come to terms with and many women have feelings of anxiety and low mood following the diagnosis. It is important to seek help if you feel like this or feel that you are unable to cope. Some women find that a support group and talking to other women with premature ovarian failure is helpful (see websites below); others find talking to friends or family or having counselling sessions can help.

**What treatments are available?**

There have not been any studies evaluating the best treatment for premature ovarian failure. Most specialists recommend that women with premature ovarian failure take oestrogen replacement because the oestrogen level is very low and this can cause bone thinning and an increase in cardiovascular risk, as well as causing many of the symptoms mentioned above.

Oestrogen replacement can be given as HRT (hormone replacement therapy) or the combined oral contraceptive pill. There are many different types of HRT and pills and the doctors and nurses in clinic will be able to give you further information. It is up to you to decide whether you would like to take oestrogen replacement and if so, which pill or HRT you would like to take.

It is important to remember that if your first treatment does not suit you there are likely to be alternatives.

**Will I be able to get pregnant?**

Unlike women with regular periods, women with premature ovarian failure do not ovulate (release an egg) every month. However, studies have shown that women with idiopathic premature ovarian failure do sometimes ovulate and approximately 5–10% will become pregnant over their lifetime. Unfortunately, there is no way of predicting which group of women this will happen to. You may read about ultrasound scans and blood tests being used to try to predict if there are any eggs left, but these are not proven and are currently only used in research settings.

The combined oral contraceptive pill is not a suitable treatment for you if you want to become pregnant because it prevents ovulation. If you want to see a fertility specialist, ask the doctor or nurse you see in clinic. If you have a diagnosis of early menopause then ovum donation is normally needed for assisted conception. If you do not want to become pregnant, it is important that you continue with contraception, as women with premature ovarian failure can conceive naturally.

**Where can I get more information?**

*The Daisy Network* – A patient run support group based in UK  
[w: www.daisynetwork.org.uk](http://www.daisynetwork.org.uk)

*International Premature Ovarian Failure Association*  
[w: www.pofsupport.org](http://www.pofsupport.org)

*Human Fertility and Embryology Association* – Information about IVF and list of clinics  
[w: www.hfea.gov.uk](http://www.hfea.gov.uk)

*National Gamete Donation Trust* – Information about donor eggs  
[w: www.ngdt.co.uk](http://www.ngdt.co.uk)
British Infertility Counselling Association – List of counsellors  
w: www.bica.net

Contact us
If you have any questions or concerns about premature ovarian failure please contact the Gynaecology results line on 020 7188 3023 on Wednesday from 2-4 at other times, If there is no answer, please leave a message and we will get back to you. Or email GynaecologyResults@gstt.nhs.uk

Pharmacy medicines helpline
For information about any medicines that you have been prescribed at Guy’s and St Thomas’ hospitals, you can speak to the staff caring for you or call our helpline.  
t: 020 7188 8748 10am to 12 noon and 2pm to 4pm, Monday to Friday.

Patient Advice and Liaison Service (PALS) – To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:  
t: 020 7188 8801 at St Thomas’  
t: 020 7188 8803 at Guy’s  
e: pals@gstt.nhs.uk

Knowledge & Information Centre (KIC) – For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas’ Hospital.  
t: 020 7188 3416

Language support services – If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.  
t: 020 7188 8815  
fax: 020 7188 5953

NHS Direct – Offers health information and advice from specially trained nurses over the phone 24 hours a day.  
t: 0845 4647  
w: www.nhsdirect.nhs.uk

NHS Choices – Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.  
w: www.nhs.uk

Guy’s and St Thomas’ NHS Foundation Trust  
St Thomas’ Hospital, Westminster Bridge Road, London SE1 7EH  
Guy’s Hospital, Great Maze Pond, London SE1 9RT  
Switchboard: 020 7188 7188 www.guysandstthomas.nhs.uk  
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