Corporate member of Plain English Campaign. 197
Committed to clearer communication.

NHS
National Institute for Health and Clinical Excellence

Long-acting reversible contraception

Understanding NICE guidance

What is long-acting reversible contraception?

Long-acting contraceptives are ones that you do not have to think about every day or every time you have sex, as you would with methods such as the Pill or condoms. These methods include:

- contraceptive injections, which work for up to 12 weeks and can be repeated
- devices that are fitted inside your womb – intrauterine devices (IUDs) and the intrauterine system (IUS), which last for between 5 and 10 years, and can be replaced after this
- implants placed under your skin, which last for 3 years, and can be replaced after this.

Injections, IUDs, the IUS and implants are called long-acting **reversible** contraceptives because you can stop using them if you decide you want to get pregnant. These methods are all for women – currently there are no long-acting reversible contraceptives for men.

This leaflet tells you about the care you can expect from the doctors and nurses who provide long-acting reversible contraceptives. The table over the page has some information to help you make the decision about whether long-acting reversible contraception is right for you and, if it is, which method to choose.

But this leaflet does not tell you everything you may need to know about choosing and using the different methods of long-acting reversible contraception, or about other types of contraception. You can ask your doctor, nurse or family planning (or contraception) clinic for leaflets on any method you are interested in. Alternatively, contact fpa (formerly known as the Family Planning Association), which provides a national information and helpline service on contraception and sexual health for men and women. Phone the helpline on 0845 122 8690 or visit the website (www.fpa.org.uk).

Is it suitable for me?

When you go to your doctor, nurse or a family planning clinic for advice about contraception, you should be given information about different methods of contraception, including long-acting reversible methods, so that you can choose the one that suits you best. This information should include:

- how effective the method is at preventing pregnancy
- how long it lasts
- possible unwanted effects and other problems
- any health benefits – for example, some methods may reduce period pain or heavy bleeding
- how the contraceptive is started or fitted, and how it is removed
- when to get advice or help while using it.

Information about NICE Clinical Guideline 30

Four versions of the guideline are available from www.nice.org.uk/CG30: this leaflet in both a print-friendly and Word format; a quick reference guide for health professionals; the NICE guideline, which contains all the recommendations; and the full guideline, which contains the recommendations and information about how they were developed and the evidence on which they were based.

You can order printed copies of this booklet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N0916). Please note that because of limited NHS resources we have to restrict the number of copies per order. We encourage practitioners to download the leaflet from our website or incorporate this information in their own literature.

Long-acting reversible contraception: how the methods compare

	Intrauterine devices (IUDs)	Intrauterine system (IUS)	Contraceptive injections	Contraceptive implants
What is it?	• A small plastic and copper device that is placed in the womb	• A small plastic device that is placed in the womb and slowly releases progestogen	• An injection that slowly releases progestogen	• A small flexible rod that is placed under the skin, usually on the upper arm, and slowly releases progestogen
How does it work?	• Can work by preventing sperm from fertilising an egg, or by stopping a fertilised egg from implanting in the womb	• Mainly by preventing a fertilised egg from implanting in the womb. In some women it prevents sperm from fertilising an egg	• Mainly by stopping the ovaries releasing an egg each month	• By stopping the ovaries releasing an egg each month
How long does it last?	• Between 5 and 10 years for the most effective types of IUD, which contain 380 mm^2 of copper • But if you are 40 or older when an IUD is fitted, it may stay in place until you no longer need contraception after the menopause. Your doctor will discuss this with you	• 5 years • If you are 45 or older when an IUS is fitted and you are not having periods when using it, it may stay in place until you no longer need contraception after the menopause. Your doctor will discuss this with you	• 12 weeks for the most commonly used injectable contraceptive	• 3 years
What is the chance of getting pregnant while using it?	• Fewer than 20 of every 1000 women who have an IUD for 5 years get pregnant	• Fewer than 10 of every 1000 women using the IUS for 5 years get pregnant	• Fewer than 4 in every 1000 women using injectable contraceptives for 2 years get pregnant	• Fewer than 1 in 1000 women who have an implant for 3 years get pregnant
Could it affect my chance of getting pregnant in the future?	• No	• No	• It can take up to a year for fertility to return to normal after your last injection, but if you do not want to get pregnant you should start using another method of contraception as soon as your last injection runs out, even if your periods have not re-started	• No
How might it affect periods?	• Periods might become heavier or more painful	• There may be irregular bleeding and spotting for the first 6 months • Periods usually become less frequent or stop after about a year	• Periods often stop • But some women have irregular or persistent bleeding when using contraceptive injections	• Periods may stop, or become longer or irregular, usually until the implant is removed • Period pain may improve

Continued

Long-acting reversible contraception: how the methods compare *(continued)*

	Intrauterine devices (IUDs)	Intrauterine system (IUS)	Contraceptive injections	Contraceptive implants
What unwanted effects does it have?	• Overall, the risk of ectopic pregnancy (where the fertilised egg implants outside the womb) is lower in women using IUDs than in women using no contraception, but in women who do become pregnant while using an IUD, the risk is higher. If you become pregnant while using an IUD, you need a check to make sure the pregnancy is not ectopic	• A few women may develop acne • Overall, the risk of ectopic pregnancy (where the fertilised egg implants outside the womb) is lower in women using the IUS than in women using no contraception, but in women who do become pregnant while using an IUS, the risk is higher. If you become pregnant while using an IUS, you need a check to make sure the pregnancy is not ectopic	• Women may gain weight (2–3 kg over a year) • There may be some thinning of the bones, but this largely recovers after stopping the injections and it does not seem to make breaking a bone more likely	• A few women may develop acne
What checks will I need while using it?	• You will need to see your doctor or nurse for a check-up after your first period • IUDs have short threads attached, which hang through the cervix into the top of the vagina. Your doctor or nurse will teach you how to feel for these, to make sure the IUD is still there. You need to do this regularly • You should see your doctor or nurse at any time if you think there is a problem related to the IUD, you want to stop using it or it is time to have it removed	• The checks are the same as for the IUD • You should see your doctor or nurse at any time if you think there is a problem related to the IUS, you want to stop using it or it is time to have it removed	• None – but you need to go back regularly for repeat injections • You should see your doctor or nurse at any time if you think there is a problem related to the injection	• None • You should see your doctor or nurse at any time if you think there is a problem related to the implant, you want to stop using it, or it is time to have it removed

Your doctor or nurse should make sure you have information you can understand, so that you can decide if a long-acting reversible contraceptive is right for you. You can ask any questions you want. As well as talking to you, he or she should also give you written information. The doctor or nurse should be able to arrange an interpreter or an advocate (someone who supports you in asking for what you want) if needed. If a woman with learning disabilities is unable to make a decision on contraception for herself, those involved in caring for her (such as family members, carers and her GP) should discuss the options available.

The doctor or nurse will need to check whether there is any reason a particular method may not be suitable for you. He or she will ask about your general health, any medical problems in your family, your periods and contraceptives you have used before. He or she may also ask questions to check whether you could be at risk of having a sexually transmitted infection. Before you start using any of these methods the doctor or nurse will need to check that you are not pregnant.

Some long-acting contraceptive methods may not take effect immediately, depending on when in your monthly cycle you start using them, or you may not be able to start using the method immediately. At your first appointment your doctor or nurse should give you a suitable contraceptive if you need one in the mean time.

If you are considering an IUD or IUS, you will need a vaginal examination. You may be offered tests to make sure you do not have a sexually transmitted infection, because this would need to be treated before the device was fitted.

Not all health professionals are trained to fit IUDs, the IUS or implants. If your doctor or nurse cannot give you the method you choose, he or she should refer you to someone who can.

Protection against sexually transmitted infections

Long-acting reversible contraceptive methods do not protect against sexually transmitted infections. Condoms can help protect against these infections. Your doctor or nurse will give you more information about this.

Special circumstances

All the methods described in this leaflet can generally be used by:

- women of any age
- women who have never had a baby
- women who are breastfeeding, or have recently had a baby
- women who have recently had an abortion
- women who are overweight
- women with diabetes
- women with epilepsy
- women who have migraines
- women who can't use contraceptives containing a hormone called oestrogen
- women who are HIV-positive.

But if you are considering contraceptive injections, you should discuss the advantages and disadvantages with your doctor if you are:

- a teenager
- more than 40 years old.

Where can I find out more?

NICE guidelines for health professionals This leaflet is a short summary of guidance published by the National Institute for Health and Clinical Excellence (NICE) for health professionals. The guidance covers the information women need to make a choice about long-acting reversible contraception, the care they should be offered, and practical points about using the different methods. There is more information about the guidance on the NICE website (www.nice.org.uk/CG030).

Glossary

Cervix: the entrance to the womb.

Hormone: substances that control different processes in the body. Some medicines are similar to hormones naturally produced in the body.

Progesterone: one of the hormones that control periods and fertility.

Progestogen: a synthetic hormone similar to progesterone naturally produced in the body.

Published by the National Institute for Health and Clinical Excellence, October 2005; ISBN 1-84629-082-1

© National Institute for Health and Clinical Excellence, October 2005. All rights reserved. This material may be freely reproduced for educational and not-for-profit purposes within the NHS. No reproduction by or for commercial organisations is permitted without the express written permission of the Institute.

National Institute for Health and Clinical Excellence
MidCity Place, 71 High Holborn, London, WC1V 6NA; www.nice.org.uk

N0916 20k 2P Oct 2005

Epilepsy - Contraception / Pregnancy Issues

This leaflet provides some initial advice about contraception and pregnancy for women who have epilepsy. However, it is best to seek expert advice on these issues from a doctor or epilepsy nurse when you are planning to start using contraception or when considering starting a family. There are other leaflets in this series that give general information about epilepsy.

There are different types of epilepsy. Other leaflets in this series include: 'Epilepsy - A General Introduction', 'Epilepsy - Partial Seizures', 'Epilepsy - Childhood Absence Seizures', 'Epilepsy - Could It Be?', 'Epilepsy - Living With Epilepsy', 'Epilepsy - Treatments', 'Epilepsy - Tonic-clonic Seizures', 'Epilepsy - Dealing With a Seizure', 'Epilepsy and Sudden Unexpected Death'.

Contraception

Some antiepilepsy medicines have a side-effect of increasing the speed in which some contraceptive pills and injections are processed by the liver. (These medicines are known as liver enzyme inducers as they speed up certain processes in the liver cells.)

The following antiepilepsy medicines are liver enzyme inducers:

- carbamazepine
- oxcarbazepine
- phenobarbital
- phenytoin
- primidone
- topiramate

The other antiepilepsy medicines , including sodium valproate, lamotrigine and ethosuximide, are not liver enzyme inducers. If you are taking an antiepilepsy medicine which is not a liver enzyme inducer then your contraceptive choices, doses, etc, are then usually the same as for any other women. (However, see below about lamotrigine.) See separate leaflet called *'Contraceptive Choices'* for details of the options.

However, if you are taking an antiepilepsy medicine that is a liver enzyme inducer, then the following is recommended:

- **If you take the combined oral contraceptive pill (COCP)** - the dose of the oestrogen part needs to be at least 50 micrograms, which is more than the usual dose. However, it is usually preferable to use an alternative contraception, if possible.
- **The progestogen-only pill is not recommended**.
- **Progestogen implants are not recommended**.
- **The combined transdermal contraceptive patch is not recommended**.
- **If you use emergency contraception tablets** - the initial dose of levonorgestrel should be increased to 3 mg (you will need to take two tablets instead of one).
- **The progestogen injection called Depo-provera®** does not interfere with liver enzyme inducing drugs. You can continue with your usual injection every twelve weeks.

Note: using either barrier methods of contraception or having any type of coil inserted (including the intrauterine system, Mirena®) are usually the most suitable forms of contraception to consider if you are taking a liver enzyme inducing drug for your epilepsy.

Special consideration - lamotrigine and the pill

There is some evidence that the COCP (the 'pill') may interact with lamotrigine (Lamictal®) in some women. Lamotrigine is an antiepilepsy medicine. It is not a liver enzyme inducer but may interact with the COCP in another way. The interaction may work 'both ways'. That is, the lamotrigine may make the 'pill' less effective and the 'pill' may also make the lamotrigine less effective and increase your risk of seizures. Therefore, the doses of both medications may need to be adjusted.

It may be preferable to consider an alternative method of contraception if you are taking lamotrigine and need to use contraception.

Note: for reliable contraception, it is best to seek advice from a doctor or nurse. They will be able to tell you if your epilepsy treatment affects any methods of contraception.

Pregnancy

Most pregnant women with epilepsy have a normal pregnancy and childbirth.

The frequency of seizures may increase in pregnancy in around 3 out of 10 women. For women with epilepsy, the risk of complications during pregnancy and labour is slightly higher than for women without epilepsy. The small increase in risk is due to the small risk of harm coming to a baby if you have a serious seizure whilst pregnant, and also the small risk of harm to an unborn baby from antiepilepsy medicines (discussed further below).

Note: the risk of complications to your unborn baby is greater with a seizure compared to the risk of not taking your epilepsy medication.

Before becoming pregnant

Before becoming pregnant, it is best to seek advice from your doctor or epilepsy nurse. You should be seen by an epilepsy expert to discuss your treatment during your pregnancy in detail. The potential risks and benefits of adjusting your treatment, if necessary, can be discussed. If your pregnancy is planned carefully then any risk of complications may be minimised.

Most of the advice is the same as for any other woman who is planning a pregnancy. (See separate leaflet called *'Planning to Become Pregnant?'*. For example, advice on diet, smoking, alcohol, avoiding infection, etc.)

However, you may be recommended to:

- Stop or reduce the dose of your treatment before you become pregnant if your seizures have been well controlled. However, deciding to come off antiepilepsy medication can be a difficult decision. Factors such as the type of epilepsy that you have can be important. For example, if you have the type of epilepsy that causes severe tonic-clonic seizures, there is a risk that you could have a severe seizure when you are pregnant if you stop your medication.
- Change to taking a different medication which is less likely to cause harm to the fetus (depending on the medication you are already taking).
- Take folic acid at a strength of 5 mg a day. This should ideally be taken before you become pregnant and continued until you are 12 weeks pregnant. Although folic acid is recommended for all women who are pregnant, the dose for women taking antiepilepsy medicines is higher than usual. Taking folic acid has been shown to reduce the risk of having a baby born with a spinal cord problem such as spina bifida.
- Notify your pregnancy to the UK Epilepsy and Pregnancy Register (www.epilepsyandpregnancy.co.uk). This is to allow information to be gathered to improve the future management of pregnant women with epilepsy.

Risk from antiepilepsy medicines

If you take antiepilepsy medicines when you are pregnant, you have a very small increased risk of having a baby with a birth defect. The most common birth defects that occur are neural tube defects (such as spina bifida), facial defects, congenital heart defects and hypospadias (a defect of the penis).

- Overall, about 2 in 100 pregnant women who take one antiepilepsy medicine have a baby with a birth defect. The risk rises to about 6-7 in 100 when taking two antiepilepsy medicines.
- However, the risks from different medicines can vary. For example, the risk for sodium valproate is about 7 in 100, whereas the risk for carbamazepine is about 2 in 100 and the risk for lamotrigine is about 3 in 100. Therefore, if possible, sodium valproate is not prescribed to women who may become pregnant.
- Taking folic acid 5 mg daily (as discussed above) is thought to reduce the risk from antiepilepsy medicines during pregnancy.
- Pregnant women who are taking antiepilepsy medicines are usually offered a high-resolution ultrasound scan to screen for birth defects at 18-20 weeks' pregnancy. However, earlier scanning may allow major birth defects to be detected sooner.
- If you have an unplanned pregnancy, you must not stop your antiepilepsy medicine without advice, as doing so may put you at risk of having a seizure. However, see a doctor as soon as possible and start taking folic acid 5 mg daily straight away.

Breastfeeding

Breastfeeding for most women taking antiepilepsy medicines is generally safe. Your doctor, midwife or health visitor can advise you in more detail.

What are the risks that your child will also have epilepsy?

In general, the probability is low that a child born to a parent with epilepsy will also have epilepsy. However, it can partly depend on your family history, as some types of epilepsy run in families. Therefore, genetic counselling may be an option to consider if you or your partner has epilepsy and also a family history of epilepsy.

Further information

Epilepsy Action
New Anstey House, Gateway Drive, Leeds, LS19 7XY
Helpline: 0808 800 5050 Web: www.epilepsy.org.uk

National Society For Epilepsy
Chesham Lane, Chalfont St Peter, Gerrards Cross, Bucks, SL9 0RJ
Helpline: 01494 601 400 Web: www.epilepsynse.org.uk

Epilepsy Scotland
48 Govan Road, Glasgow, Scotland, G51 1JL
Helpline: 0808 800 2200 Web: www.epilepsyscotland.org.uk

Epilepsy Wales
PO Box 4168, Cardiff, CF14 0WZ
Helpline: 08457 413 774 Web: www.epilepsy-wales.co.uk

References

- Epilepsy, Clinical Knowledge Summaries (June 2009)
- Bromley RL, Baker GA, Meador KJ; Cognitive abilities and behaviour of children exposed to antiepileptic drugs in utero. Curr Opin Neurol. 2009 Apr;22(2):162-6. [abstract]
- No authors listed; Intrauterine devices: an effective alternative to oral hormonal

contraception. Prescrire Int. 2009 Jun;18(101):125-30. [abstract]
- Walker SP, Permezel M, Berkovic SF; The management of epilepsy in pregnancy. BJOG. 2009 May;116(6):758-67. [abstract]
- Burakgazi E, Harden C, Kelly JJ; Contraception for women with epilepsy. Rev Neurol Dis. 2009 Spring;6(2):E62-7. [abstract]

Comprehensive patient resources are available at www.patient.co.uk

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. EMIS has used all reasonable care in compiling the information but make no warranty as to its accuracy. Consult a doctor or other health care professional for diagnosis and treatment of medical conditions. For details see our conditions.
© EMIS 2009 Reviewed: 19 Nov 2009 DocID: 4769 Version: 38