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Contraceptive injection

The contraceptive injection contains a progestogen hormone. It is used to prevent pregnancy.

What is the contraceptive injection?

The contraceptive injection is an effective form of contraception that is given to prevent pregnancy. It contains a progestogen hormone called depo medroxyprogesterone acetate (DMPA). Progestogen hormones are very similar to a woman's own hormone called progesterone.

Depo-Provera® is the brand used most often and it is given every 12 weeks. Sayana Press® is very similar to Depo-Provera® and also contains DMPA. Noristerat® is a brand which is rarely used as it is limited to very short-term use. The rest of this leaflet is about the injections that contain DMPA.

The contraceptive injection is sometimes called a LARC. This stands for long-acting reversible contraceptive. You can read about the other LARCs that contain progestogen in our separate leaflets called Contraceptive Implant and Intrauterine System (IUS). There is also a separate leaflet on the LARC which doesn't contain any hormone, called the Intrauterine Contraceptive Device (The Coil).

How does the contraceptive injection work?

The injection works by injecting progestogen into a muscle or under the skin.. It works in three ways:

• Stopping the release of the egg from the ovary (ovulation).

- Thickening the mucus at the neck of the womb (cervix) which forms a mucous plug. This stops sperm getting through to the womb (uterus) to fertilise an egg.
- Thinning the lining of the womb.. This makes it unlikely that any egg that has managed to be fertilised will be able to implant in the womb and develop.

How effective is the contraception injection?

It is 99.8% effective at preventing pregnancy if used correctly. Research shows that in a real world setting, rather than in research settings, it is 94% effective at preventing pregnancy.

Advantages of the contraceptive injection

- You do not have to remember to take a pill every day. You only have to think about contraception every 2-3 months.
- It does not interfere with sex.
- It can be used when breastfeeding.
- Periods often stop completely, which is perfectly safe.
- It may help some of the problems people get with periods, such as premenstrual tension, heavy, painful periods and endometriosis.
- It can be used by many of the women who cannot take the combined pill.
- It is not harmful to women with sickle cell disease and may even reduce the pain of a sickle crisis.
- It may be taken by women who are on medication that would interfere with other forms of hormonal contraception - for example, medications for epilepsy or HIV.
- It may reduce the chances of getting cancer of the ovary or cancer of the womb (endometrial cancer)

 If you want to stop using it you don't have to go back to your doctor or nurse to have it removed; you just have to wait for it to wear off.

Disadvantages of the contraceptive injection

- The injection cannot be removed once given. Any side-effects may last for more than 2-3 months, until the injection wears off.
- It may take some time after the last injection for you to become fertile again. This time varies from woman to woman. It can take up to a year before fertility returns. This delay is not related to the length of time you use this method of contraception.
- There is a possible link between the injection use and cervical cancer. It is not known if this is because of the injection or other factors. It is important to be up to date with cervical smear tests.
- It does not protect against sexually transmitted diseases.
- Your periods are likely to change. During the first few months, some women have irregular bleeding which can be heavier and longer than normal. However, it is unusual for heavy periods to persist. After the first few months it is more common for the periods to become lighter than usual, although they may be irregular. Many women have no periods at all, which many see as a benefit. The longer it is used, the more likely it is that periods will stop. After one year of using the injection periods stop for about 7 in 10 women.

Some women find that having unpredictable or irregular periods can be a nuisance. If you develop irregular bleeding while receiving the injection then you should inform your doctor or nurse. You may be able to have your next injection early or be given other treatment to stop the bleeding. Irregular bleeding can sometimes be due to another reason, such as an infection. This may need to be treated.

Contraceptive injection side-effects

Apart from changes to periods (menstrual cycle), side-effects are uncommon. If one or more should occur, they often settle down over a couple of months or so. One possible side-effect is weight gain. This seems to be a particular problem for young women (under 18 years) who are already overweight when they start the injection.

Some women also report fluid retention, worsening acne, headaches and breast discomfort. However, there is little evidence that the injection causes these symptoms.

The most common reason for women to stop having the injections is because of irregular bleeding.

The injection can lead to some 'thinning' of the bones. This does not usually cause any problems and the bones go back to normal when the injections are stopped. Using injectable contraception for many years might lead to more bone thinning. It is therefore recommended that you have a review every two years with your doctor or nurse. They will discuss if this method is still the best choice for you.

Very occasionally, the injection can cause some pain or swelling at the site of the injection. You should see your doctor or nurse if you have any signs of infection at the site of injection (for example, redness or swelling).

Who cannot have the contraceptive injection?

Most women can have the contraceptive injection. Your doctor or family planning nurse will discuss any current and past illnesses. For example, you should not have it if you have had breast cancer, liver disease, or cardiovascular disease such as angina or a stroke.

If you have risk factors for 'thinning' of the bones (osteoporosis) then it is normally advisable to use another method of contraception. Examples of risk factors include:

- Not having a period for six months or more (as a result of overexercising, dieting or an eating disorder).
- Drinking a lot of alcohol.
- Smoking.
- Being underweight.
- A close family history of osteoporosis.

How is the contraceptive injection given?

The injection is given into a muscle, usually in the buttock, or into the thigh or tummy (abdomen). It should not be given during pregnancy. It is important to be sure you are not pregnant when you have your first injection. However, if you were already pregnant without knowing, there is no evidence that it does the baby or the pregnancy any harm.

- The first injection is usually given during the first 1-5 days of a period. If you have the injection within five days of starting a period, you will be protected immediately.
- Further injections are then given up to 13 weeks apart.
- If you miss your appointment, you can have the injection at any time, as long as you are certain you are not pregnant. Your practice nurse or doctor will advise you to use extra contraception (such as a condom) for seven days after the injection.
- If you are late for your injection but have had sex and can't be certain that you aren't pregnant, you may still be able to have your injection. You will then need to do a pregnancy test three weeks later. This is what is called an 'off-label use' and not all practices will allow it.

Sayana Press® has been designed so that you can give it to yourself. This may be useful if you have trouble getting to your surgery or clinic. Your doctor or nurse can advise you about this.

The doctor or nurse will tell you which type of injection you have and how long it is until the next injection. It can be given up to two weeks early. This may be convenient if, for example, you are due to be on a holiday when your next injection is due.

Where can you get the contraceptive injection?

In the UK, you can obtain the contraceptive injection at the following places:

- General Practices. This may be with a GP or with a practice nurse.
- Sexual Health Clinics.
- Brook Advisory Centres.

Note: don't forget, you will lose protection against pregnancy if you are late in having the next injection.

Further reading

- Long-acting reversible contraception; NICE Clinical Guideline (October 2005 - updated July 2019)
- Progestogen-only Injectable Contraception Clinical Guidance; Faculty of Sexual and Reproductive Healthcare (December 2014, amended 2023)
- UK Medical Eligibility Criteria Summary Table for intrauterine and hormonal contraception; Faculty of Sexual and Reproductive Healthcare, 2016 amended September 2019
- Lopez LM, Ramesh S, Chen M, et al; Progestin-only contraceptives: effects on weight. Cochrane Database Syst Rev. 2016 Aug 28;(8):CD008815. doi: 10.1002/14651858.CD008815.pub4.
- Contraception Progestogen-only methods; NICE CKS, September 2022 (UK access only)
- Find a sexual health clinic near you; NHS services

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Last updated by: Dr Caroline Wiggins, MRCGP 27/04/2023	
Peer reviewed by: Dr Hayley Willacy, FRCGP 27/04/2023	Next review date: 17/03/2028

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