## Part 6: Treatment of pain due to endometriosis

Endometriosis is a chronic disease. In that sense, there is no cure for endometriosis, but the symptoms can be reduced with the right treatment. Communication is the key to finding a treatment that fits you. Please discuss your options with your doctor and ask any questions you may have. Your doctor will be happy to explain the different options and answer your questions.

Women with endometriosis have either pain, **fertility problems** or they have both. Treatment of endometriosis focuses on resolving or reducing pain due to endometriosis or on improving fertility, so a patient can get pregnant naturally or through fertility treatments. For treating endometriosis, the doctor can prescribe medical treatment or advise surgical treatment. Both will be explained in detail here.

Depending on the patient, the treatment will be different. Your doctor will take several factors into consideration when prescribing medical treatment or advising surgical treatment. These factors include:

- The preferences of the woman
- The type of disease (peritoneal disease, ovarian cyst or deep endometriosis)
- The severity and type of pain symptoms
- The wish to become pregnant immediately or at a later stage
- The costs and side-effects of some treatments
- The age of the woman
- The treatments she has already received.
- The doctor (country, expert centre)

This means that two women with endometriosis could receive different treatments and even that one woman could receive different treatments over time depending on her preferences, her age, her wish to become pregnant.

Important to remember is that medical treatment works only when they are taken as prescribed. Stopping medical treatment often means that the symptoms recur.

In the next section, options for medical treatment and surgical treatment will be explained.

# Which medication can be used before a definite diagnosis of endometriosis?

When the doctor suspects a woman to have endometriosis related pain, the patient and the doctor can decide that without a **definite diagnosis** (made by a laparoscopy) the pain is treated as if the patient has endometriosis. This is called **empirical treatment** or treatment without a definitive diagnosis.

For painful symptoms suspected to be caused by endometriosis, empirical treatment includes analgesia, hormonal contraceptives or progestagens.

Since GnRH analogues have considerable side effects and are very expensive, doctors and patients should consider not using this type of drugs for empirical treatment.

#### Recommendations in the guideline:

The GDG recommends clinicians to counsel women with symptoms presumed to be due to endometriosis thoroughly, and to empirically treat them with adequate analgesia, combined hormonal contraceptives or progestagens. (Good Practice Point)

## Can I take analgesics (painkillers) for pain due to endometriosis?

Analgesics, like non-steroidal anti-inflammatory drugs (NSAIDs), are medical therapies that influence how the body experiences pain. These therapies are not specific for endometriosis-associated pain, and they do not alter any disease mechanism in the body like the hormonal treatments do. Analgesics have little side effects, they are cheap, easily accessible and widely used, but very little studies have investigated whether they actually help in reducing endometriosis-associated pain. Long-term use of NSAIDs can be associated with side effects affecting the stomach. Therefore, protection of the stomach is advisable.

Anyway, from clinical experience, the guideline development group recommends that clinicians should consider NSAIDs or other analgesics to reduce endometriosis-associated pain.

#### Recommendations in the guideline:

The GDG recommends that clinicians should consider NSAIDs or other analgesics to reduce endometriosisassociated pain. (Good Practice Point)

## What are the options for hormonal treatment of pain?

Medical treatments for endometriosis include hormonal treatments or pain medication (analgesics).

Hormonal treatments in clinical use are:

- hormonal contraceptives(cyclical use or continuously)
- progestagens (oral or in an Intra Uterine Device)
- anti-progestagens,
- GnRH agonists
- aromatase inhibitors

Medical treatment in endometriosis is focussed on resolving pain. Medical treatment should not be prescribed to improve fertility.

In general, medical treatments can help to reduce pain symptoms in women with endometriosis. Which type of medication fits best to an individual patient depends on the complaints, the efficacy and side effects of the treatment and the preferences of the patient.

Another factor is the cost and availability of a certain treatment. In some countries within Europe, some treatments are not available, they are very expensive, or they are not reimbursed. This information can also influence the decision for a certain treatment

#### Recommendations in the guideline:

Clinicians are recommended to prescribe hormonal treatment (hormonal contraceptives, progestagens, antiprogestagens, or GnRH agonists) as one of the options, as it reduces endometriosis-associated pain. (based on level A and B evidence)

The GDG recommends that clinicians take patient preferences, side effects, efficacy, costs and availability into consideration when choosing hormonal treatment for endometriosis-associated pain. (Good Practice Point)

#### How does hormonal treatment work?

Endometriosis is a problem associated with a woman's menstrual cycle and dependent on the activity of estrogens.

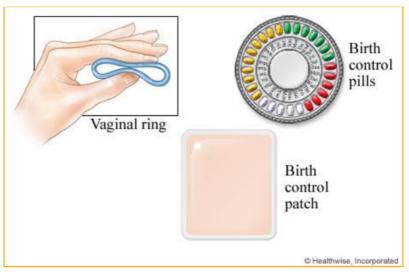
The aim of hormonal treatment for pain in women with endometriosis is lowering the estrogen level. It is important to know that hormonal treatment does not cure endometriosis. Hormonal treatment suppresses the activity of the disease and hence the pain symptoms. However, after discontinuation of the treatment symptoms tend to recur. It is not known which patients will have a relapse of pain symptoms.

## **Hormonal contraceptives**

Hormonal contraceptives are widely used for contraception and generally accepted. They contain low doses of **hormones** (**estrogen** and **progesterone**) and can reduce pain associated with endometriosis by stopping follicular growth and hence reducing the production and concentration of estrogens. Low estrogens stop the activity of the growth of the **endometrium** in and outside the uterus, and thus pause endometriosis. The **progesterone** in the pill decreases the activity of the **endometrium** directly.

The side effects are limited and hormonal contraceptives are not expensive. Your doctor can prescribe different types of hormonal contraceptives:

- the oral contraceptive pill (taken with or without a monthly pill-free week),
- a vaginal contraceptive ring, or
- a transdermal patch.



Options for hormonal contraceptives

#### Recommendations in the guideline:

Clinicians can consider prescribing a combined hormonal contraceptive, as it reduces endometriosis-associated dyspareunia, dysmenorrhea and non-menstrual pain (based on level B evidence)

Clinicians may consider the continuous use of a combined oral contraceptive pill in women suffering from endometriosis-associated dysmenorrhea (based on level C evidence)

Clinicians may consider the use of a vaginal contraceptive ring or a transdermal (estrogen/progestin) patch to reduce endometriosis-associated dysmenorrhea, dyspareunia and chronic pelvic pain (based on level C evidence)

### **Progestagens and anti-progestagens**

Progestagens can be used in different forms: orally, as a 3-monthly injection or a levonorgestrel-releasing intrauterine system. Different types of progestagens are medroxyprogesterone acetate (MPA), dienogest, cyproterone acetate or danazol. Progestagens are also used as contraceptives, but they only contain **progesterone**, not estrogen. Anti-progestagens (gestrinone) have a similar method of action. Progestagens are relatively inexpensive.

The different types of progestagens and anti-progestagens have different side effects. Doctors are recommended to take the side effects into account when prescribing this type of medication and discuss them with the patient. Patients are recommended to report any side effects with their doctor and discuss their options.

A levonorgestrel-releasing intrauterine system is a small device that is inserted in the uterus and releases low levels of **progesterone**. A levonorgestrel-releasing intrauterine system is frequently used for contraception; it has limited side effects and is user-friendly. In women with endometriosis, the levonorgestrel-releasing intrauterine system is an option for reducing symptoms of pain.



A levonorgestrel-releasing intrauterine system http://m.mirena.com/

#### Recommendations in the guideline:

Clinicians are recommended to use progestagens [medroxyprogesterone acetate (oral or depot), dienogest, cyproterone acetate, norethisterone acetate or danazol] or anti-progestagens (gestrinone) as one of the options, to reduce endometriosis-associated pain (based on level A evidence)

The GDG recommends that clinicians take the different side-effect profiles of progestagens and antiprogestagens into account when prescribing these drugs, especially irreversible side effects (e.g. thrombosis, androgenic side effects) (good practice point)

Clinicians can consider prescribing a levonorgestrel-releasing intrauterine system as one of the options to reduce endometriosis-associated pain. (based on level B evidence)