FACT SHEET
HORMONAL TREATMENTS FOR ENDOMETRIOSIS & ADENOMYOSIS

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ENDOMETRIOSIS AT A GLANCE

Endometriosis is a condition where tissue similar to the endometrium (the lining of the uterus) grows elsewhere in the body. This tissue responds to reproductive hormones where oestrogen stimulates patches forming superficial, lesions or endometrioma (ovarian cysts). Inflammation is generally present, and adhesions (scar tissue) can also form in response. Endometriosis within the muscle tissue of the uterus is known as adenomyosis, typically characterised by an enlarged uterus and heavy menstrual flow as well as pain at time of period.

ROLE OF HORMONE THERAPIES:

Without a definitive cure, or even an agreement as to the causes or nature of endometriosis, treatments generally aim to reduce or eliminate symptoms, improve quality of life and fertility, if desired.

Some studies have shown that following surgery recurrence can be significantly reducing with a long-term hormonal treatment, which may be a major consideration in the lifetime choice of therapies.

As well as reducing recurrence risk, treatment decisions depend on a range of factors:

- age,
- symptoms,
- clinical history,
- extent of the disease,
- co-morbidities (other co-existing conditions)
- cultural considerations, and
- individual preference and priorities which may include pain/symptom management and/or fertility, and which may change over the lifetime experience of endometriosis

Hormonal treatments can be used on their own or in combination with surgical treatment and/or analgesics, alongside nutritional and lifestyle changes such as exercise, sleep and pain management, as well as complementary therapies.

Note that not all pain/symptoms are due to endometriosis. Adhesions may also be present and continue to cause symptoms, while chronic/persistent pain may respond to medications for neuralgia.

TYPES OF HORMONAL TREATMENTS

Endometriosis and adenomyosis respond to reproductive hormones. Hormone therapies aim to therapeutically change the cycle of these hormones to reduce endometriosis deposits and their consequent impact.

Hormone treatments may control symptoms, slow progression, and significantly reduce the risks of recurrence following excision surgery. Options are:

- Progestin-only contraceptives and medications which thin the endometrium are presumed to have a similar effect on endometriosis. They may also directly reduce inflammation.
- Combined Oral Contraceptives control ovulation which may be implicated in development of endometrioma. Taken continuously – now the recommended method – they can also suppress periods
- GnRH Analogues work by creating a temporary pseudo-menopausal state.

PROGESTIN OPTIONS

Progestin treatments can be delivered in pill form as well as long-term intra-uterine and implantable devices (see IUD and Jadelle below). These options can be combined if symptoms are not sufficiently controlled.

Progestin-only contraceptive pill (POP / MINIPILL)

- Cerazette (which uses the progestin Desogestrel, and suppresses ovulation)
- Microlut (Levonorgestrel)
- Noriday (Norethisterone)

Minipills must be taken at about the same time each day. Generally they suppress periods (amenorrhoea) and will sometimes also suppress ovulation. While not fully funded, Cerazette is often recommended as it is known to suppress ovulation and is also less time-sensitive.

Progestin medications (not contraceptives)

- Primolut (Norethisterone)
- Provera (Medroxyprogesterone acetate)
- Siterone (Cyproterone acetate)

These medications are more usually prescribed for other conditions such as abnormal menstrual bleeding, skin and hair conditions.

INTRAUTERINE DEVICES (IUD)

Originally designed to treat heavy periods for women desiring contraception, Intrauterine Devices are small T-shaped frames made from a pliable plastic which are placed inside the uterus (womb). The devices contain the progestin Levonorgestrel which is slowly released over a period of time.

As a treatment for endometriosis Mirena typically last for three years and the smaller Jaydess two years (as a contraceptive five years and three years). They are commonly fitted by Family Planning clinics, by some GP's and may be placed during surgery.

Recent studies have shown that fertility quickly returns after removal.

IMPLANTABLE DEVICE (JADELLE)

Jadelle uses the same progestin as the IUD's (Levonorgestrel) and works similarly, but in the form of a pair of plastic rods inserted beneath the skin – generally on the inside of the upper arm. They have a similar lifetime to Mirena, but women over 60kg may find them less effective over time.

They are commonly fitted by Family Planning clinics, by some GP's and may be placed during surgery.

COMBINED ORAL CONTRACEPTIVES TAKEN CONTINUOUSLY

These work as a contraceptive by suppressing ovulation, and taken continuously (which is now the recommended regimen) also suppress periods. As well as considerably improving contraception efficacy, continuous usage also significantly reduces side effects such as headaches, bloating and mood swings.

GNRH-AGONISTS

- Zoladex (Goserelin) – injectable implant
- Lucrin (Leuprorelin) – by injection

GnRH-agonists are synthetic versions of gonadotropin releasing hormone (GnRH), which have a role in controlling the menstrual cycle.

These medications are 'anti-hormonal', so when used continuously essentially create a temporary pseudo-menopausal state. They work by signalling the pituitary gland to stop producing luteinising hormone, which is responsible for stimulating the production of oestrogen from the ovaries.

An 'add-back' hormonal medication (HRT) may be recommended to reduce menopausal side effects and the risk of bone loss.

Generally, these therapies aren't recommended for longer than 6 months, so offer a temporary symptom respite. They may be offered post-surgery, or for women who do not want surgery.

CHOICE OF HORMONE THERAPIES:
It's important to discuss the various treatments with your doctor to help choose options which best suit your needs. There are advantages and disadvantages to all the types of treatments, and it may take some time and trialling to find the right combination for you. The best treatment combination for you may well change over your lifetime experience of endometriosis

Please also see our other treatment factsheets:

- Surgical Treatment for Endometriosis
- Analgesic (Pain Relief) Treatment for Endometriosis.

For further information see the following Insight Endometriosis Factsheets:

- Endometriosis 101
- Endometriosis Symptoms
- Symptom Diaries
- Analgesic (Pain Relief) Treatment for Endometriosis
- Hormonal Treatments for Endometriosis & Adenomyosis
- Pain Management for Endometriosis

References:

- Ministry of Health. 2020. Diagnosis and Management of Endometriosis in New Zealand https://www.health.govt.nz/publication/diagnosis-and-management-endometriosis-new-zealand
- BPAC: NZ: Oral Contraceptives – Selecting a Pill: https://bpac.org.nz/2019/contraception/oral-contraceptives.aspx
- Medsafe Jun 2016: Jadelle and the Impact of Weight: https://www.medsafe.govt.nz/profs/PUArticles/June2016/JadelleAndWeight.htm