Menstruation - amenorrhoea

Amenorrhoea is the absence of menstrual periods. Apart from during childhood, pregnancy, breastfeeding and menopause, the absence of periods may be caused by a problem with the reproductive system. One of the most common causes of amenorrhoea is when the body’s hormones are disrupted.

The body’s ability to make the female sex hormones oestrogen and progesterone can be affected by a range of factors, including certain reproductive disorders, losing or putting on weight, emotional stress or exercising too much.

Primary and secondary amenorrhoea

Amenorrhoea is divided into two categories:

- **Primary amenorrhoea** – periods have not started by 14 years and there are no signs of other sexual characteristics (such as developing breasts and pubic hair), or periods have not started by 16 years, even though other sexual characteristics have developed.
- **Secondary amenorrhoea** – periods have stopped for about six months.

The menstrual cycle

Brain structures called the hypothalamus and pituitary gland control the menstrual cycle. The pituitary gland makes hormones that trigger the ovaries to make oestrogen and progesterone. These hormones make the lining of the uterus (womb) thicker to prepare the body for a pregnancy that may happen.

When pregnancy does not happen, hormone levels drop and the lining of the uterus comes away. This is called a period or menstruation. The cycle then happens again. Disorders of the hypothalamus, pituitary gland or ovaries can affect menstruation, causing amenorrhoea.

Causes of amenorrhoea

A range of factors can affect how the hypothalamus works and cause amenorrhoea, including:

- emotional stress
- losing weight
- exercising too much
- certain medication used to treat mental health conditions
- disorders of the endocrine system, such as hypothyroidism (an underactive thyroid gland).

Some women are more at risk of amenorrhoea caused by stress and losing weight.

Other disorders that can cause amenorrhoea include:

- **Polycystic ovarian syndrome** – the ovaries develop clusters of blister-like cysts. Symptoms include irregular periods and a lot of hair growth. Women with polycystic ovarian syndrome are more at risk of amenorrhoea when they put on weight.
- **Hyperandrogenaemia** – the body makes high levels of male sex hormones, which can affect the reproductive system. This can be caused by tumours of the ovary or adrenal gland, or certain conditions present at birth.
• Hyperprolactinaemia – the body makes high levels of the breastfeeding hormone prolactin. Levels rise because the pituitary gland may be overactive or there may be a tumour on the gland.
• Ovarian failure or early menopause – low levels of oestrogen cause ovulation to stop, which stops the menstrual cycle.
• Abnormalities of the vagina – a sealed hymen, for example, can stop menstrual blood from leaving the vagina. This is a rare condition and symptoms include a swollen abdomen, delayed periods and abdominal pain.

Diagnosis of amenorrhoea

For a doctor to diagnose amenorrhoea, all other possible causes, such as certain reproductive disorders, need to be eliminated first. Tests can include:

• pregnancy tests, which can be either a urine or blood test
• physical examination to check overall health and see if other sexual characteristics, such as breast growth and pubic hair, have developed
• medical history, including gynaecological history and contraceptive methods used
• hormone tests to check how the hypothalamus, pituitary glands and ovaries are working
• other scans, which can include CT scans and ultrasounds of the reproductive system.

Treatment for amenorrhoea

Treatment for amenorrhoea depends on the cause. If the cause is losing a lot of weight or exercising too much, treatment will include encouraging the woman to have a healthier body weight.

Other treatment options can include losing weight (if overweight) and managing the underlying disorder. Hormone therapy (HT), such as the combined oral contraceptive pill, will usually cause regular periods to return, but will not treat any underlying cause.

Where to get help

• Your doctor
• Gynaecologist
• Family Planning Victoria Tel. (03) 9257 0100 or freecall 1800 013 952

Things to remember

• Amenorrhoea is the absence of menstrual periods.
• The most common cause is when the body’s hormones are disrupted, which can happen because of emotional stress, losing or gaining a lot of weight, exercising too much or certain reproductive disorders.

This page has been produced in consultation with, and approved by:

Family Planning Victoria