

## Amenorrhoea and Eating Disorders

Amenorrhoea is a common complication experienced by individuals who engage in disordered eating patterns.

Amenorrhoea refers to the absence of a woman's menstrual period when she is in her reproductive years. Amenorrhoea can be further defined as either primary or secondary amenorrhoea. Primary amenorrhoea is defined by the absence of menses by age 14 with the absence of secondary sex characteristics, or, the absence of menses by age 16 in the presence of normal pubertal development. Secondary amenorrhoea is defined by the absence of menses following a history of menstruating normally. Females who have not menstruated for 3 months should be evaluated to determine the cause.

Amenorrhoea occurs when the normal secretion of gonadotropin releasing hormone from the hypothalamus is interrupted.

Although primarily considered a manifestation of low weight or malnutrition, amenorrhoea can be associated with many factors including prolonged weight loss, erratic eating behaviours, poor nutrition, excessive exercise and stress and even whilst being at a 'normal' weight.

Polycystic ovary syndrome is a common cause of irregular or absent menses in young women and can co-occur with an eating disorder. In amenorrhoea secondary to polycystic ovary syndrome alone, oestradiol and FSH is usually normal and LH may be normal or elevated with an LH:FSH ratio > 2:1.

The persistence of amenorrhoea for longer than 6 months is associated with lowered bone mineral density, and therefore needs to be addressed as a priority.

Menses usually return upon maintaining a healthy weight and reducing eating disorder behaviours, although regular menses may be delayed for up to 12 months. There is individual variation in the weight required for resolution of hypogonadism and resumption of menses. Individual's progress may be monitored by measuring FSH, LH and oestradiol for objective evidence of recovery.

### Management Plan

- Obtain a detailed medical history to help rule out other causes of amenorrhoea, including pregnancy
- Obtain a menstrual history including – menarchal status, date of last period, patterns of menstruation, episodes of absence of menses, use of oral contraceptive pill
- Investigations - FSH, LH and oestradiol levels. Pelvic ultrasound may show prepubertal appearing ovaries and uterus.
- Other investigations may be indicated where there are other features suggesting possible dual pathology
- Facilitate weight gain towards a healthy target weight if underweight
- Facilitate normal healthy eating behaviours
- Monitor for normalisation of biochemistry, menstrual function, growth and pubertal development
- Prescription of an Oral Contraception Pill (other than for contraception) to mimic 'normal' menstruation is not indicated.