

Primary Amenorrhoea

Clinical presentation

Primary amenorrhoea is failure to establish menstruation by:

- Age 16 years in girls with normal secondary characteristics
- Age 14 years in girls with no secondary sexual characteristics

Associated complications:

- Osteoporosis, CVD, infertility, Psychological distress

Primary amenorrhoea history

- Family history
- Exclude pregnancy
- Cyclical lower abdominal pain without bleeding
- Ask about the development of secondary sexual characteristics
- Sexual history
- Exclude pregnancy
- Previous chemotherapy or radiotherapy
- Medication
- Illicit drug use
- Enquire about hypothalamic dysfunction

Possible underlying causes

Physiological causes include:

- Pregnancy
- Constitutional delay is common

Pathological causes include

- Genito-urinary malformations
- PCOS
- Hypothalamic-pituitary dysfunction due to chronic illness/stress/excess exercise
- Androgen insensitivity syndrome
- Ovarian failure
- Gonadotrophin deficiency
- 5-alpha reductase deficiency
- Congenital adrenal hyperplasia
- Androgen-secreting tumour (rare)

Examination

- BMI
- Check for signs of: hirsutism, abdominal distension, Turner's syndrome, androgen insensitivity, thyroid disease.

Pelvic examination:

- Inappropriate in young girls who are not sexually active
- May be appropriate in older women presenting with primary amenorrhoea

Investigations

- FSH & LH Levels
- Total testosterone
- Prolactin levels
- TSH levels
- bHCG to exclude pregnancy
- Pelvic US to exclude structural abnormality

- If exercise-associated amenorrhoea is suspected advise modification of current exercise programme
- Otherwise consider Referral

Refer to gynaecologist

Girls with normal secondary characteristics who have not started menstruating by 16 years

Refer to paediatrics

Girls not menstruating by age 14 with no secondary sexual characteristics

Refer to a counsellor

suspected stress-induced amenorrhoea

Refer to endocrinologist

- if suspected hyperprolactinaemia / thyroid or signs of androgen excess

Further Evaluation of Primary Amenorrhea (probably in Secondary Care)

