Adenomyosis

- Adenomysis is the presence of endometrial glands & stroma in the myometrium with adjacent smooth muscle hyperplasia.

- Adenomyosis is implicated as a cause of both heavy & painful menstruation(i.e.menorrhagia & secondary dysmenorrhea).
- Most published information on adenomyosis is based on studies on hysterectomy specimens because until recently, the diagnosis is only possible in retrospect but recent advances in imaging facilitate the diagnosis.

- Although adenomyosis & endometriosis are histologically similar but are distinct diseases in term of epidemiology in which adenomyosis is more common in parous , middle aged women.

Incidence

- Adenomyosis is present in 15-30% of hysterectomy specimens but it's overall contribution to menstrual disorders is unclear.
- Incidence increase with increased parity & with history of miscarriage &induced abortion.
- Some studies reported increased incidence following caesarean section & others have not.
- Incidence decrease in smokers.

Aetiology

- Adenomyosis is supposed to occur due to abnormal ingrowth of the endometrium & invagination of it's basal layer.
- This process may be triggered by a weakness in the smooth muscle of the myometrium , by increased intrauterine pressure or by surgical trauma.

Clinical presentation

- Symptoms include heavy painful menstruation
- On examination, the uterus may be bulky & tender but both history& clinical findings are non-specific. Some relate the severity of dysmenorrhoea to the extent of adenomyosis &depth of invasion into myometrium.

Diagnosis

A. Transvaginal ultrasound may be of help. The followings may be seen :

1. Diffuse echogenicity.
2. Myometrial cysts.
3. Subendometrial nodules.
4. Subendometrial linear striation.
5. Poor definition of the endometrium/ myometrial border.
6. Asymmetric myometrial thickening.

B. MRI may be of value.

Both techniques even if used in combination may lack accuracy.

Laparoscopic & hysteroscopic myometrial biopsy have limited use in practice compared with non invasive imaging.

Treatment

- Medical treatment:

  NSAID , combined oral contraceptives, high dose progesterone & levonorgestrel releasing intrauteine system. Also, danazol & GnRH analogue as second line options.

- Surgical management:

  Endometrial ablation to treat menstrual abnormalities has been tried but the presence of deep lesion of adenomyosis may regenerate causing failure of this treatment & on this basis,the use of LNG_IUS may be preferred to endometrial ablation when diagnosis of adenomyosis is suspected.

- Hysterectomy is the definitive treatment & should not be accompanied by oophorectomy.
- When fertility preservation is desired, there is reports of laparoscopic or microsurgical excision or coagulation of adenomyosis with variable results.