Multi-differentiation in endometrial stromal sarcomas

- Endometrial gland formation
- Smooth muscle differentiation
- Sex-cord differentiation
- Rhabdomyoblastic and osseous differentiation
Mixed stromal and smooth muscle differentiation
Mixed stromal and smooth muscle differentiation

- Well-circumscribed margins - stromomyoma/stromal nodule
- Infiltrative margins - ESS
- should be regarded as malignant tumours with the potential for haematogenous spread, particularly when they contain foci of cellular anaplasia
Uterine stromal tumours with sex-cord-like differentiation
Uterine tumours resembling ovarian sex cord tumours

- Rare
- Pre or menopausal women
- Incidental finding
- Benign or uncertain malignant potential
- Local or regional spread or abdominal relapse
Undifferentiated uterine sarcoma

- Is extremely rare
- Very aggressive tumour
Undifferentiated uterine sarcoma

- DD: in curettage
  - Epithelioid leiomyosarcoma
  - Stromal component of MMMT
  - Undifferentiated carcinoma
  - Lymphoma
Other spindle cell tumour

- Malignant mixed Mullerian tumours
  - Postmenopausal women
  - Aggressive behaviour
  - Early metastasis
- Mullerian adenosarcoma
Major problem in small biopsy

- Undifferentiated malignant tumour
  - Carcinoma
  - MMMT
  - Leiomyosarcoma
  - Undifferentiated uterine sarcoma
Mullerian adenosarcoma

- Uncommon
- Locations: uterus, cervix and ovary
  - in the vagina, fallopian tube, arising from peritoneal surfaces, or
  - outside the female genital tract, for example in the intestine
Mullerian adenosarcoma: WHO definition

- Two or more MF per 10 high-power fields is required for a diagnosis.

- In practice the diagnosis is made with stromal mitotic activity less than this if the characteristic architecture and cambium layer is present.
Mullerian adenofibroma

- A very rare diagnosis
- Postmenopausal women

Benign ?? uncertain malignant potential
Mullerian adenofibroma

- **Consider malignant**
  - Increased cellularity
  - Cambium layer
  - Cellular atypia
  - >2 mf/10hpf
Summary

Spindle cell tumours of the uterus

- The problems of smooth muscle tumours
- The problems of the Mullerian adenosarcoma/adenofibroma
- Undifferentiated Malignant tumours
  - Carcinoma
  - MMMT
  - Epithelioid leiomyosarcoma
  - Undifferentiated uterine sarcoma