Overview

P16 issues (LAST)
- Majority of small diagnostic biopsies
- Serous carcinoma issues & p53
- Frozen sections (intra-operative consultations)

Background
- Multiple terminologies for HPV-associated squamous lesions of the lower ano-genital tract, derived from multiple specialties
- Consensus process to unify terminology across lower ano-genital sites
- Desires for:
  - Uniform terminology to reflect current knowledge of HPV biology
  - Optimisation of biomarkers
  - Clarity in communication across specialties

Low-grade squamous intraepithelial lesion (LSIL)
- LSIL represents the clinical and morphological manifestation of a productive HPV infection
- Associated with a wide range of both low and high-risk HPV types
- Low-grade refers to the associated low risk of recurrent or future cancer
- Synonyms: CIN 1, mild squamous dysplasia, koilocytic atypia
- Some lesions are p16-positive

High-grade squamous intraepithelial lesion (HSIL)
- Synonym: CIN 2-3 (in cervix), moderate or severe squamous dysplasia
- Grading based on maturation, p16 almost always diffusely expressed (‘block-type’)
Diagnosis of CIN 2 (HSIL) requires p16+

Morphologic ‘CIN2’ that is p16 negative is LSIL

P16 negative - therefore LSIL

Case: SB6

80 year old woman with recurrent vulvar lesion.
Differentiated VIN

Different case:
Differentiated VIN with features suspicious for invasion

Case: SB1
35 year old woman, no history. Curette.

- Collapse of stroma & shedding functionalis
- Exhausted secretory glands
- Shedding fragments form 'double-contoured' balls
- Stromal granulocytes are a normal component of shedding
- Maybe papillary syncytial metaplasia
- Not a static process

Case SB1: Menstrual endometrium

Case: SB2
70 year old woman with PMB. Curette.

- Mixed epithelial and mesenchymal lesion
- Benign or atypical epithelium and stroma is LG malignant
- Often papillary polypoid, phyllodes-like
- Collaring – looks like endom stroma (usually CD10, ER PR +)
- Epithelium may be endometrioid, mucinous squamous or tubal +/ heterologous stromal elements

Case SB2: Adenosarcoma
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- Variable mitotic rate but don’t need many for diagnosis
- Recur locally up to 30%
- When at least 25% of tumour contains HG sarcoma component, lesion is called adenosarcoma with sarcomatous overgrowth

Case: SB3
62 year old woman with PMB. Pipelle biopsy endometrium.

Case: SB4
70 Year old woman with endometrial hyperplasia 10 years ago. PMB. Abundant curettings.

Diagnosis: Carcinosarcoma
Degree of atypia distinguishes this entity from carcinosarcoma.
Tends to have LG atypia, but grade on conventional glandular components.
Only rarely includes actual (bland) heterologous elements.
The 2 components seamlessly blend together.
Epithelial markers at least focally +ve corded areas
Carcinosarcoma: 2 components more demarcated, mesenchyme –ve for epithelial markers, p53 often +ve

Case SB4: Corded and hyalinised endometrioid carcinoma

Case SB5
40 year old woman with previous hyperplasia on curette. Endometrial curetting.
AH and FIGO G1 endometrioid adenocarcinoma

Case SB8
40 year old woman with abundant POC.

Case SB9
28 year old woman with RPOC (bleeding 6 months post delivery)
(IHC case)
Case SB9: Placental site trophoblastic tumour (PSTT)
• Neoplasm of implantation site intermediate trophoblast
• Average age 30
• Interval from previous (index) gestation 2 weeks – 17 years
• Histo: sheets of polygonal to spindle intermediate trophoblast cells
• May see infiltration at edge
• Vascular invasion +++
• Necrosis, and Absence of villi

Case SB9: Placental site trophoblastic tumour (PSTT)
• +ve for HPL, HCG may be focal
• Inhibin+, keratin+
• Ki 67~10%-30%
• Negative: PLAP, muscle and melanoma markers
• DDx: chorioCa, ETT, exaggerated placental site, molar gestation, PD carcinoma, melanoma (placental site nodule)

Placental site nodule

Case: SB10
25 year old woman with peritoneal nodule at time of surgery for ovarian lesion.
Case SB10: Gliomatosis Peritonei
- Disseminated implants of mature glial tissue on peritoneal surfaces.
- Almost exclusively seen in association with ovarian teratomas, usually immature.
- In majority of cases of GP, the lesion is present at time of initial surgery, rather than being a recurrence.
- Old theory of maturation of teratoma, but molecular studies indicate gliomatous differentiation from peritoneal surface.

Case SB10: Gliomatosis Peritonei
- Mechanism obscure - growth factors liberated by teratoma?
- Favourable prognosis.

Case SB7
75 year old woman with vault biopsy.
Dx: serous carcinoma recurring in vault after previous hyst for serous ca endometrium

Case SB11
55 year old woman with prophylactic BSO.
HG serous carcinoma tube
Case: FS1
48 year old woman with 160mm loculated ovarian cyst

Case: FS2
45 yr old woman with 170mm ovarian mass-collapsed cyst with solid nodules in wall.

Case: FS3
55 year old woman with 240mm solid ovarian mass. Past history of colorectal carcinoma.
Dx: met colorectal ca to ovary
Paraffin sections

CK20
CK7
CDX2
Villin