Slide seminar 2 - pancreas

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Slide 2

- Distal pancreatectomy
- Well-defined cystic lesion containing watery fluid
- Representative H&E sections of the lesion
Microcystic serous cystadenoma

- Papillae are of no clinical significance
- Occasionally, cytoplasm may be eosinophilic
- Prominent network of small capillary-sized vessels immediately beneath the epithelium
- Entrapped ducts, acini, islets, nerves
- Degenerative changes

Slide 3

- 60-year-old female. Weight loss. CT - 8cm diameter cystic lesion in tail of pancreas.
- Distal pancreatectomy. Well-defined, thick-walled cyst containing cloudy fluid
- Representative H&E sections of the lesion
Slide 3
Mucinous cystic neoplasm with low-grade dysplasia

Differential diagnosis
- Retroperitoneal mucinous cystic tumour: uncommon tumour occurring almost exclusively in women, particularly those of reproductive age. Do not involve pancreas
- Branch duct IPMN: MCN not communicate with duct system, is solitary and thick walled, has ovarian-type stroma
Mucinous cystic neoplasm

- Origin of ovarian-type stroma?
  (i) Left primordial gonad in proximity to dorsal anlage => ectopic ovary within body & tail of pancreas
  (ii) Neoplastic epithelium of MCNs induces ovarian stromal differentiation in resident cells in the pancreas
  (iii) Hormone receptor expression in periductal stromal cells => sensitive to PG & oestrogen => stromal proliferation induce neoplasia in ductal epithelium

- Activation of Wnt/beta-catenin signalling cascade occurs specifically within the MCN stroma, but not epithelium
  Sone M et al. Gastroenterol 2014; 146: 227-37

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Slide 1

- Whipple’s resection
- Multicystic lesion in head of pancreas
- Representative H&E sections of the lesion

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Thoughts?
Slide 1
Intraductal papillary mucinous neoplasm (IPMN), branch duct-type with low-grade dysplasia

Tumours showing intraductal growth
- IPMN & ITPN
- Acinar cell carcinoma
- Undifferentiated carcinoma with osteoclast-like giant cells
- Well-differentiated endocrine tumour
- Metastases

Slide 8
- 33-year-old female. Asymptomatic. CT – 3cm lesion in body of pancreas.
- Distal pancreatectomy
- Well-circumscribed 3cm diameter solid lesion
- Representative H&E sections of the lesion

Page 5
Thoughts?

Slide 8
Solid pseudopapillary neoplasm

Page 6
Solid pseudopapillary neoplasm

- Immunopositive for vimentin, CD10, CD56, cyclin D1, beta-catenin, progesterone receptor, oestrogen receptor beta
- A1AT or A1ACT +ve globules
- May be synaptophysin +ve and AE1/AE3 and CAM5.2 +ve
- Immunonegative for E-cadherin, chromogranin A, trypsin, pancreatic hormones
- Core panel: vimentin, beta-catenin, progesterone receptor

Differential diagnosis

- Pancreatic endocrine neoplasm: packeted growth pattern, but lack the degenerative changes such as pseudopapillae, foamy macrophages, cholesterol clefts
- Acinar cell carcinoma: typically occurs in older age group – 60yrs – and in men; solid neoplasm, granular cytoplasm, prominent nucleolus, frequent mitoses