Slide seminar

Case 12

Colin A Purdie

BDIAP Symposium on Breast Pathology

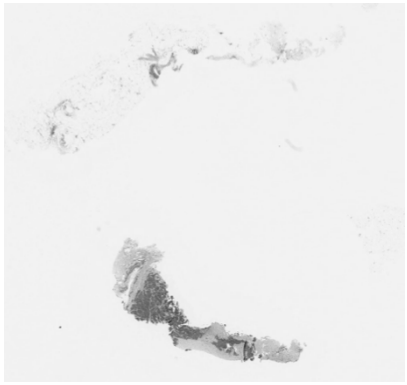
Saturday 25th November 2017

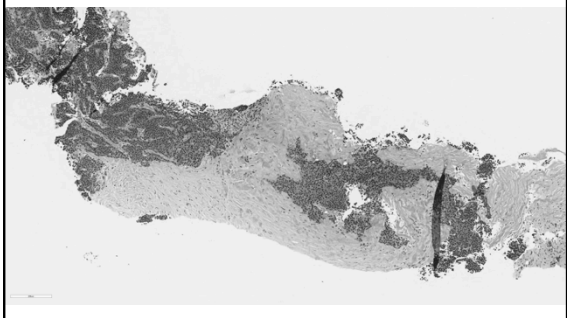
NHS Tayside

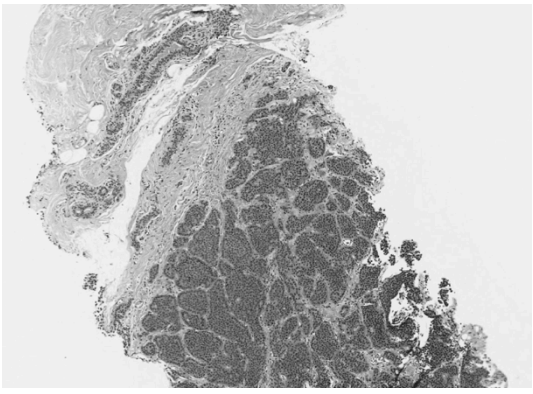
DUNDEE

Case 12

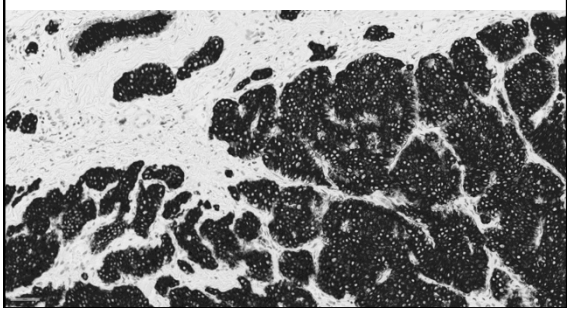
- Female, 72
- Asymptomatic
- Screen detected solid mass right breast
  - M3, 11mm
  - U3, 8mm



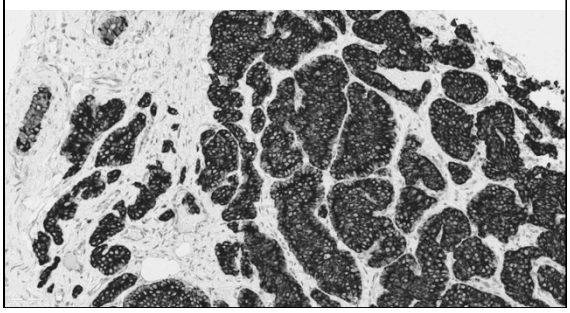




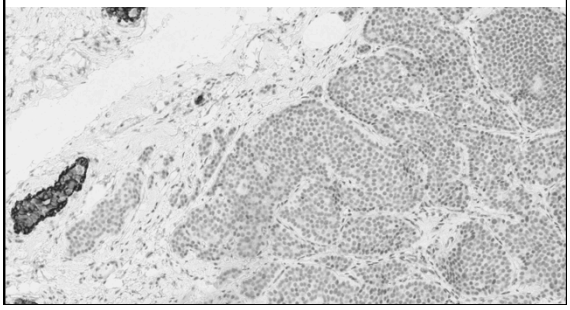
AE1/3



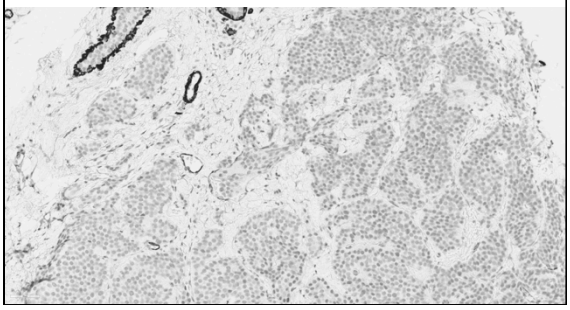
CK18



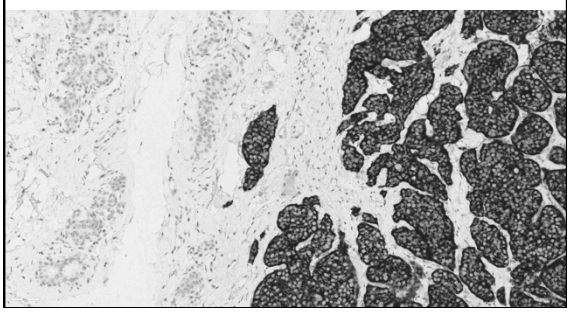
CK5



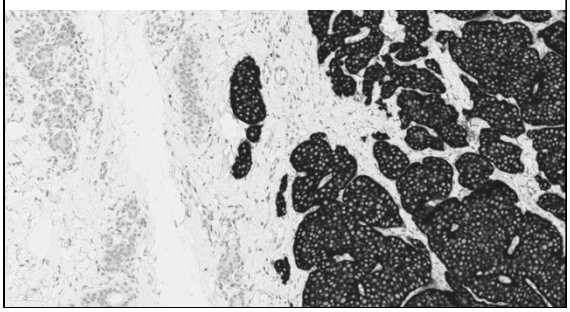
Myosin



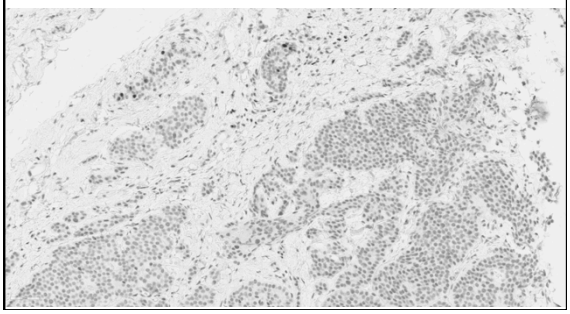
Chromogranin



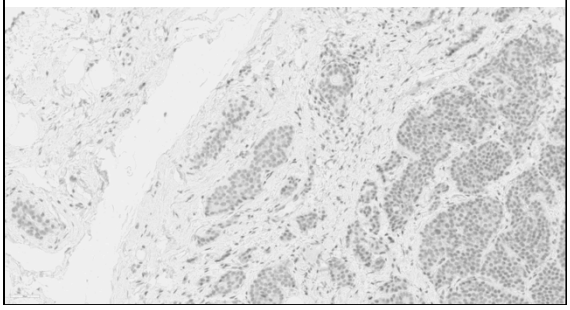
Synaptophysin



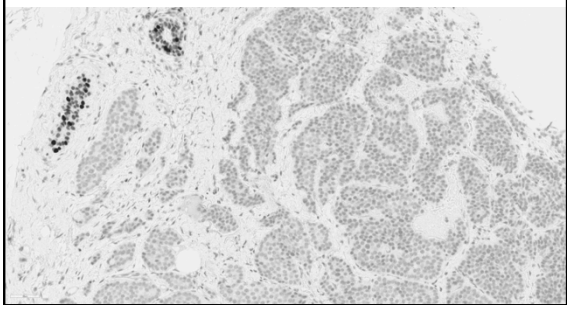
ER



GCDFP



GATA3



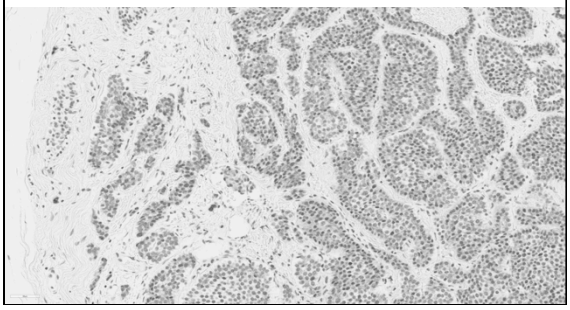
Neuroendocrine Carcinomas

- Expression of NE markers
  - Chromogranin
  - Synaptophysin
  - NSE
- Dense core granules on EM
- Usually ER and PR positive

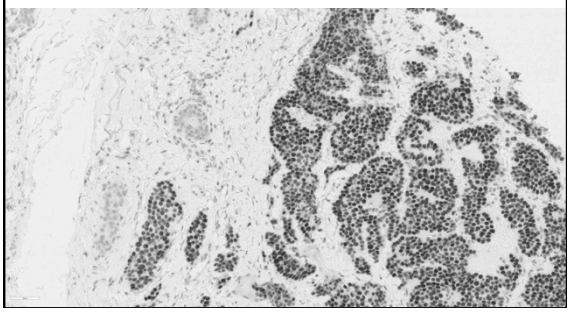
Carcinomas with neuroendocrine features

- Neuroendocrine tumour, well-differentiated
  - Densely cellular, solid nests and trabeculae
  - G1 or G2
- Neuroendocrine carcinoma, poorly differentiated/small cell carcinoma
  - Identical to lung counterpart
  - May be TTF1+
- Invasive carcinoma NST with neuroendocrine features
  - Up to 30% of all breast carcinomas (*esp* mucinous Ca)
- Metastatic
  - Well-differentiated neuroendocrine tumour (carcinoid)
  - Poorly differentiated neuroendocrine carcinoma/small cell carcinoma

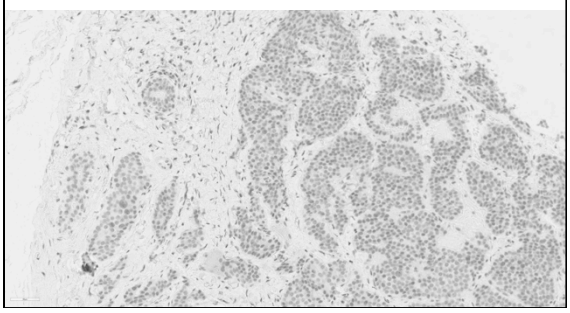
CK20



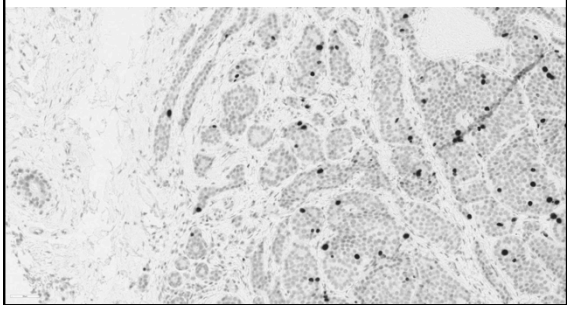
CDX-2



TTF1



Ki67



Management

- CT Thorax & abdo & pelvis with contrast
  - Within the anterior mediastinum, there is a 4cm by 3.5cm by 5cm homogenous mass.
  - There is diffuse nodal disease affecting the root of the mesentery particularly around the superior mesenteric artery and exploding down into the ileocolic region. The more confluent area measures 2.5cm.
  - No clear evidence of focal bowel mass
  - The pelvis appears unremarkable.
- NM Octreotide scan with SPECT :
  - History of right breast carcinoid tumour noted. No abnormal tracer uptake elsewhere to suggest metastatic disease or a primary tumour at another site.

Management

- Bloods
  - Chromogranin A 38.1 (nmol/l) (normal range 0-6)

Case 12

- Diagnosis
  - Metastatic well differentiated neuroendocrine carcinoma

References

- G. Bussolati and S. Badve, "Carcinomas with neuroendocrine features," in WHO Classification of Tumours of the Breast, S. R. Lakhani, I. O. Ellis, S. J. Schnitt, P. H. Tan, and M. J. van de Vijver, Eds., pp. 62–63, IARC Press, Lyon, France, 2012.