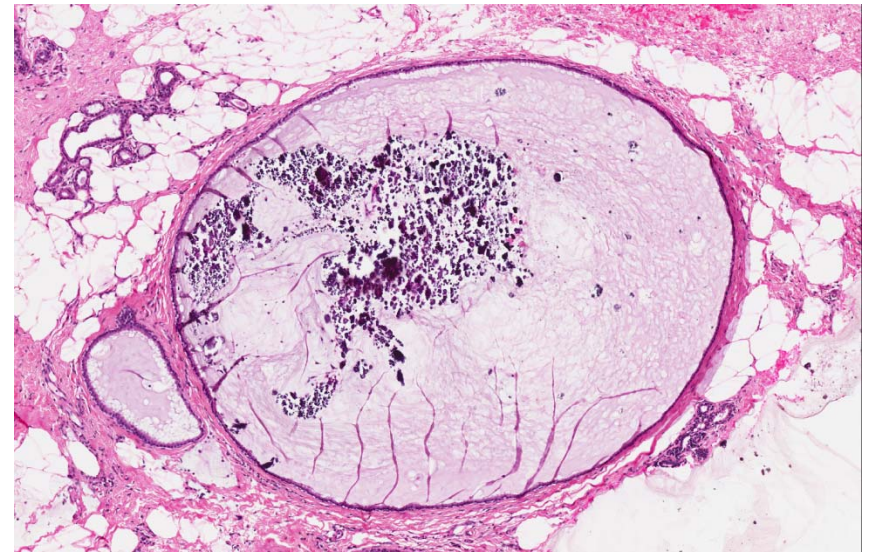
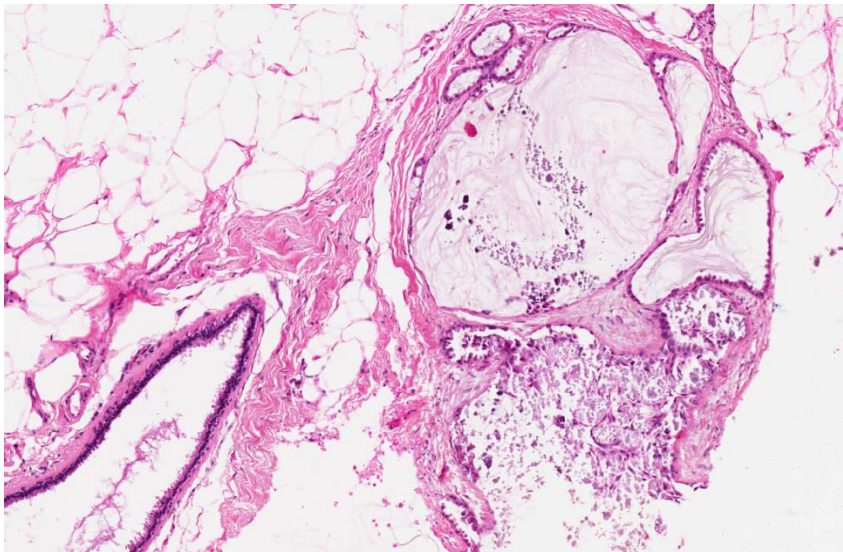
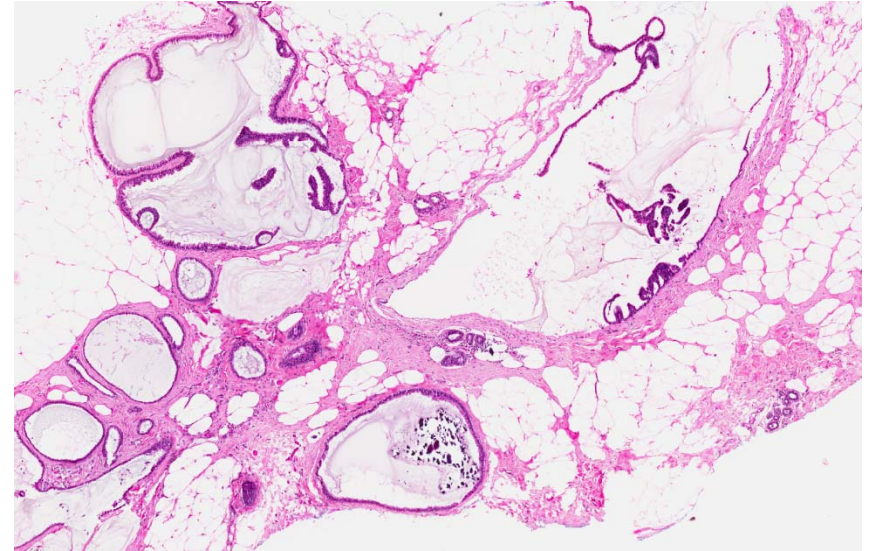
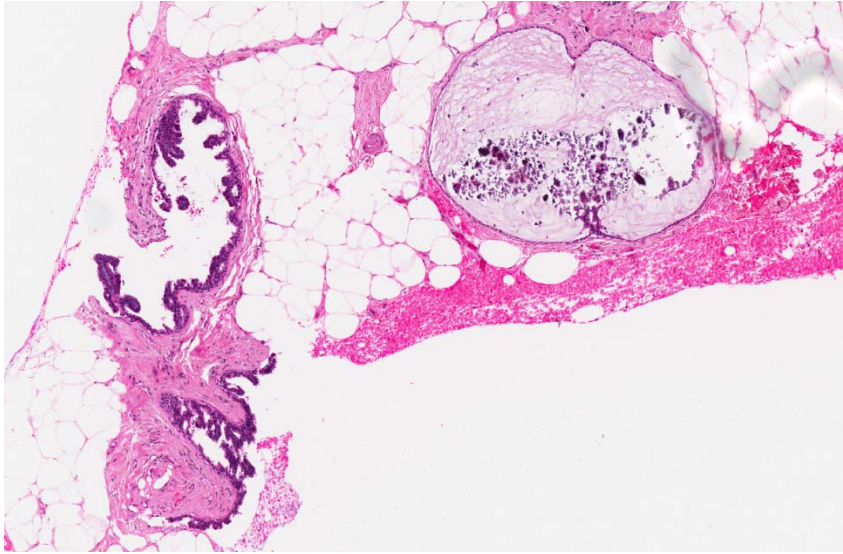


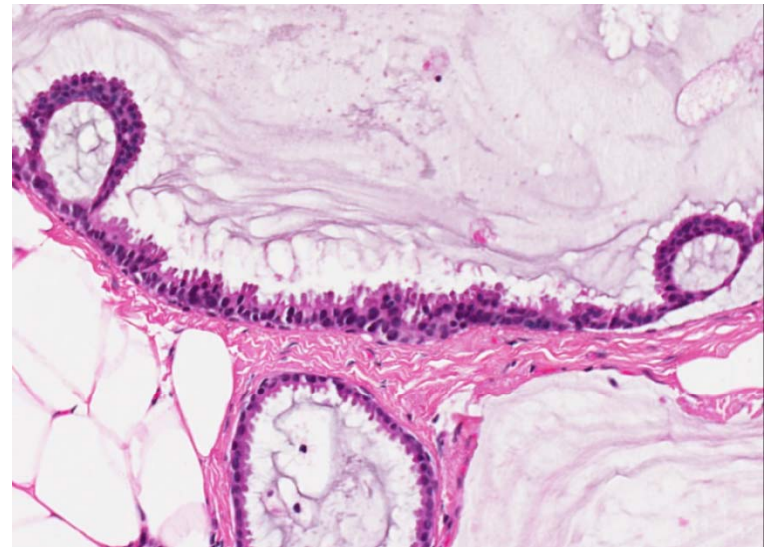
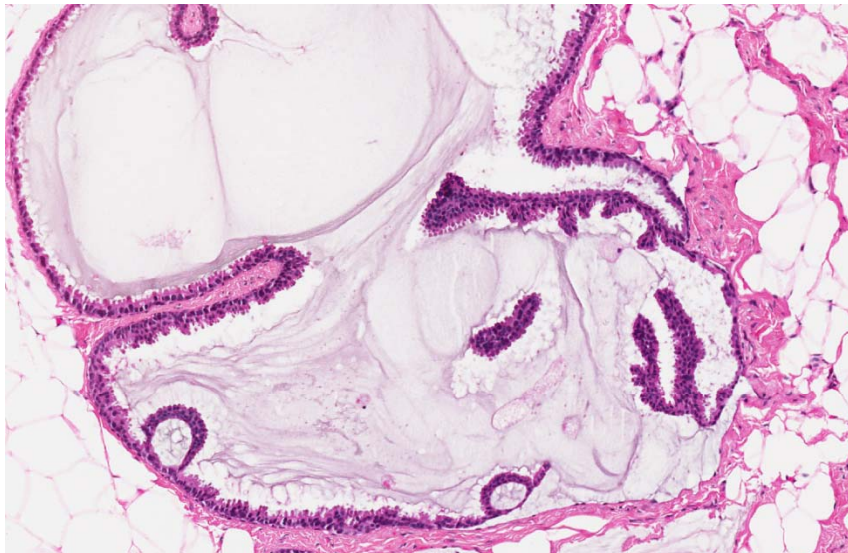
# Set C.1

- 49 year old Chinese female underwent stereotactic mammotome biopsy for radiologically detected calcifications during breast screening.

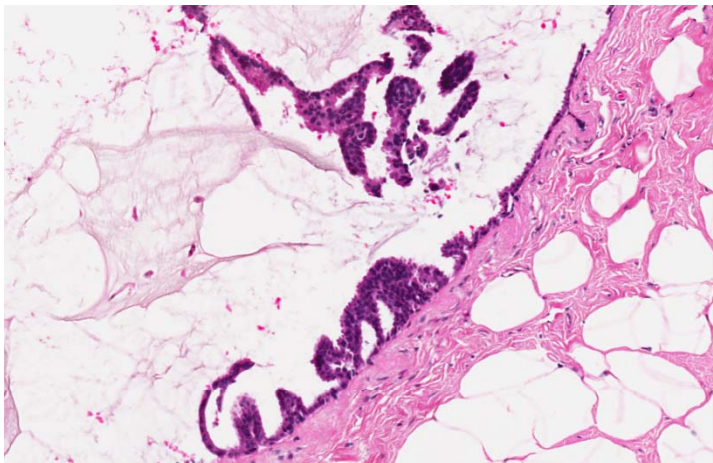
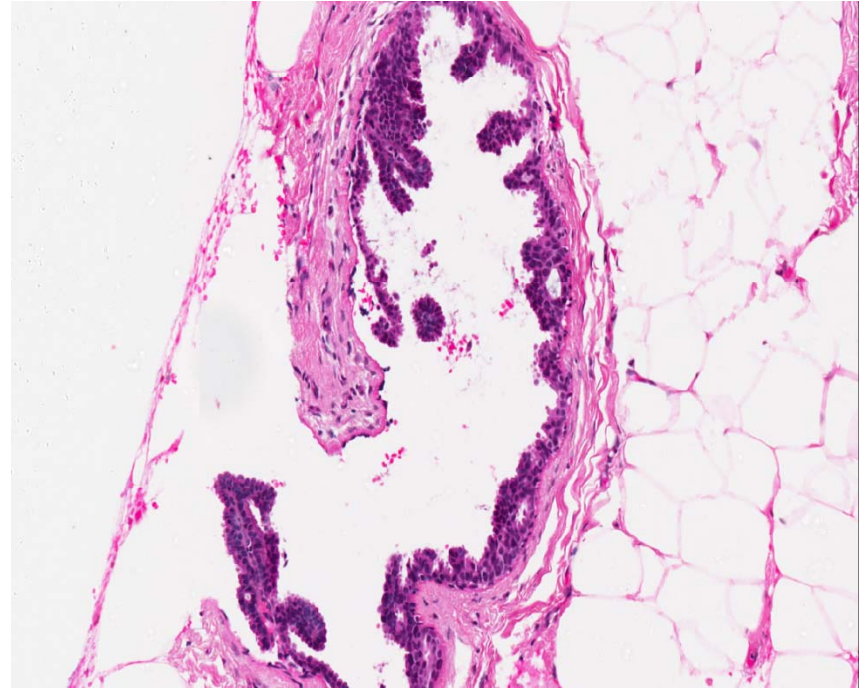
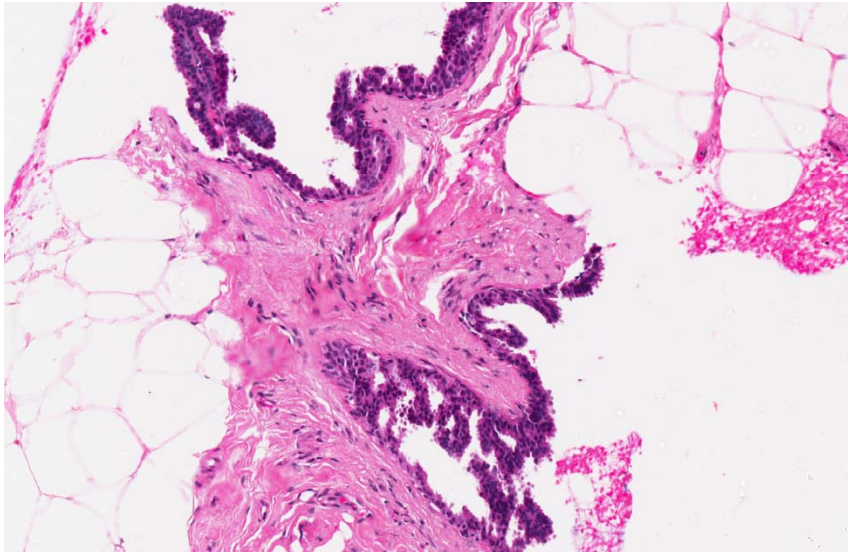
# Set C.1



# Set C.1



# Set C.1



- Mucocele-like lesion with atypical ductal hyperplasia and calcifications.
- Subsequent open excision revealed no additional atypical epithelial changes.

# Mucocele-like lesion

- Mucocele-like “tumour”.
- Mucin containing cysts that may rupture and discharge the secretion into adjacent stroma.
- Resembles the mucocele of the salivary gland.
- Mammography reveals a nodular lesion with or without calcifications; or clustered calcifications alone.
- Sometimes, multiple aggregated cysts are seen grossly, containing mucinous material.

# Mucocele-like lesion

- May be associated with attenuated epithelium, benign epithelial proliferation to ADH, DCIS and invasive mucinous carcinoma.
- Described initially in 1986 by Rosen as benign lesions, which can present as a mass or be discovered incidentally.
  - *AJSP 1986 Jul;10:464-9.*

# Mucocele-like lesion

- **Rosen et al. 1996 Sep;20(9):1081-5.**
  - 53 lesions from 49 patients.
  - 25 MLL were benign and 28 were malignant (14 in situ, 14 invasive).
  - Two had bilateral benign MLL.
  - Two had bilateral MLL with CA.
  - Patients ranged in age from 24 to 79 years (mean, 48 years).
  - No appreciable differences in age, tumour size, or laterality between patients with benign or malignant MLL.
  - MLL with CA had coarse calcifications more often than benign MLL, and were more likely to be detected mammographically.
  - Intraductal carcinoma was micropapillary or cribriform.
  - Invasive carcinoma was usually mucinous.
  - Fewer of the benign lesions were estrogen and progesterone receptor positive.
  - HER2/neu positivity was more common in MLL with CA.



- *ADH vs DCIS?*

- Depends on extent of epithelial cytoarchitectural changes.
- If the extent is limited and  $\leq 3$  mm, a diagnosis of ADH is favoured.
- For larger lesions  $> 3$  mm, a diagnosis of low-grade ductal carcinoma in situ is warranted.
- High nuclear grade changes, regardless of size, indicate DCIS.

# Learning points

- Approach to mucocele-like lesion on core biopsies.
- Diagnosis of ADH on core biopsies – qualitative and quantitative criteria.