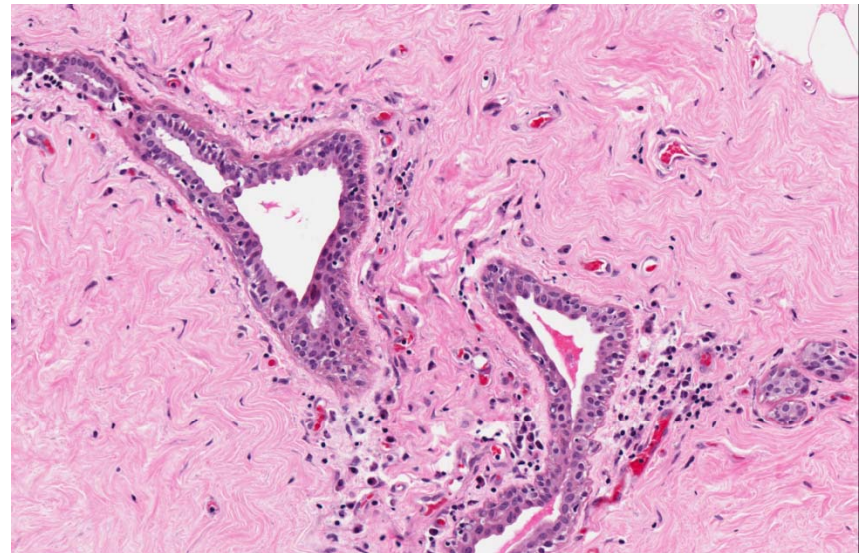
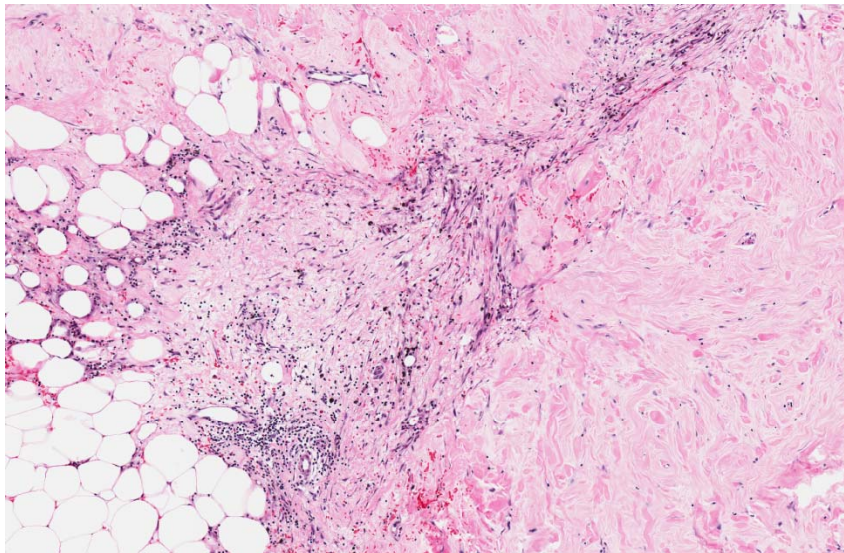
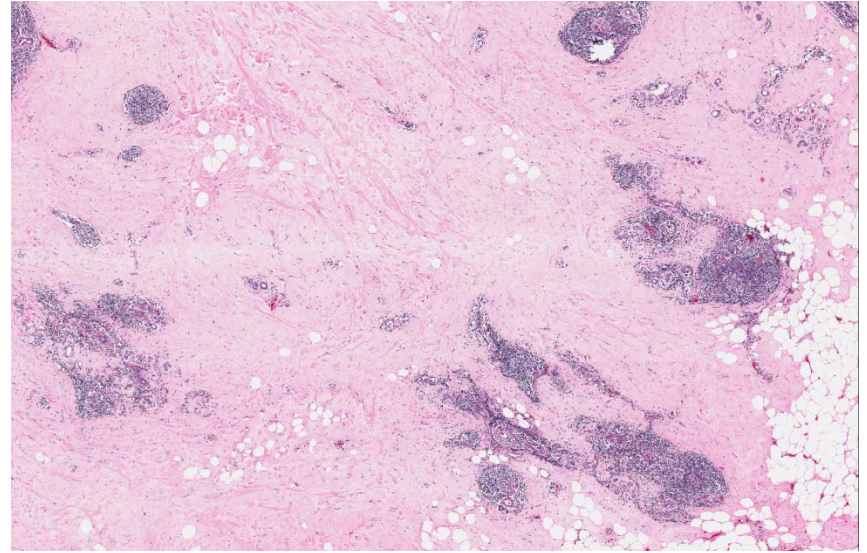
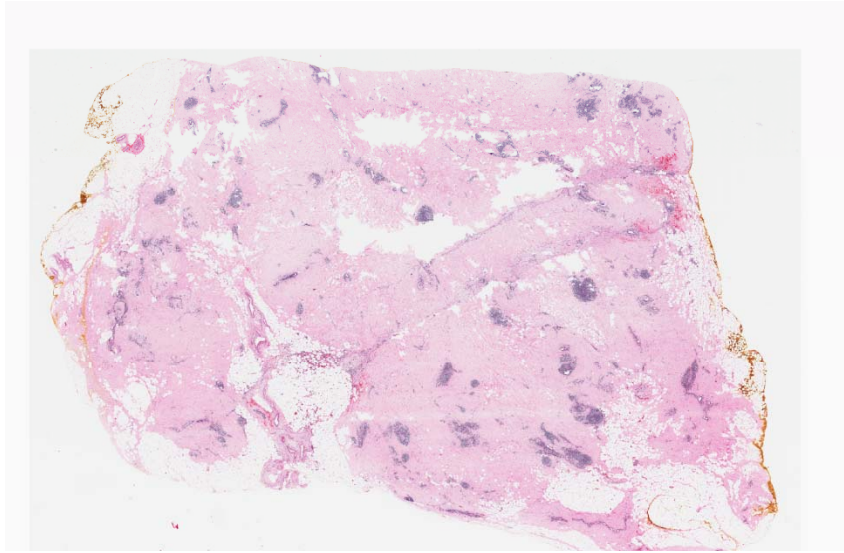


Set D.7

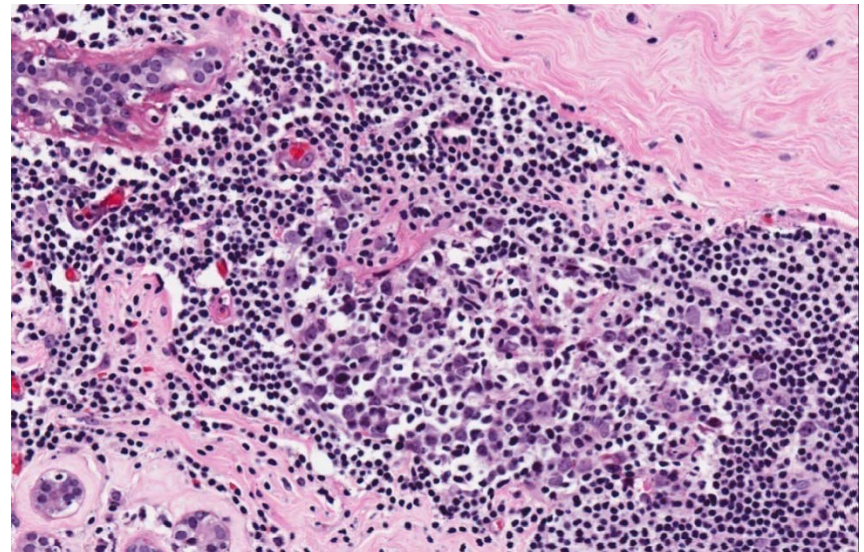
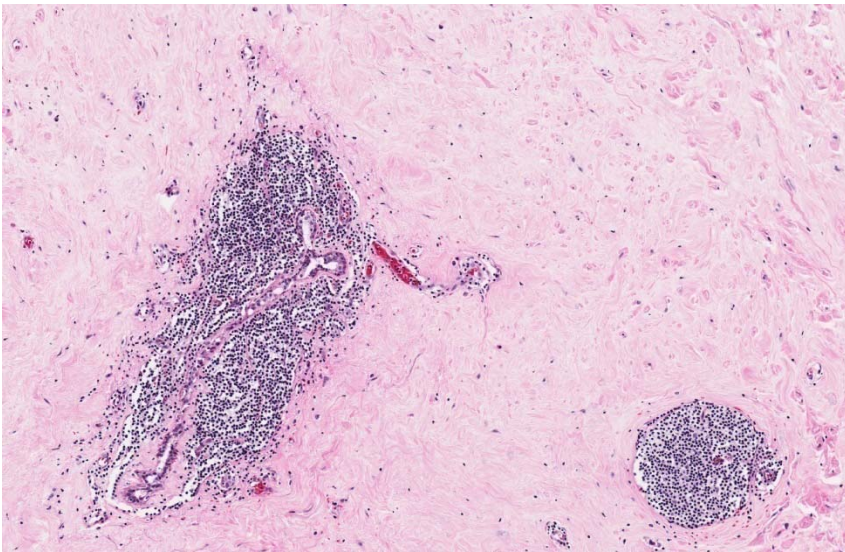
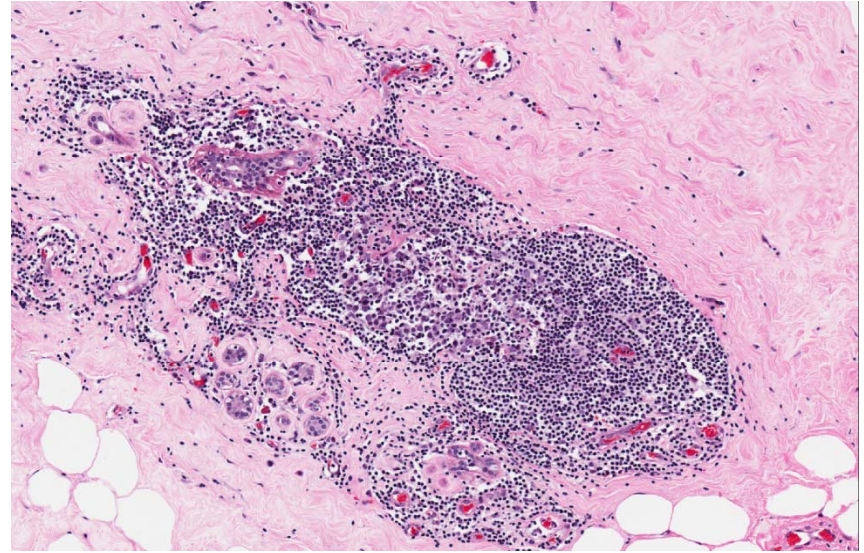
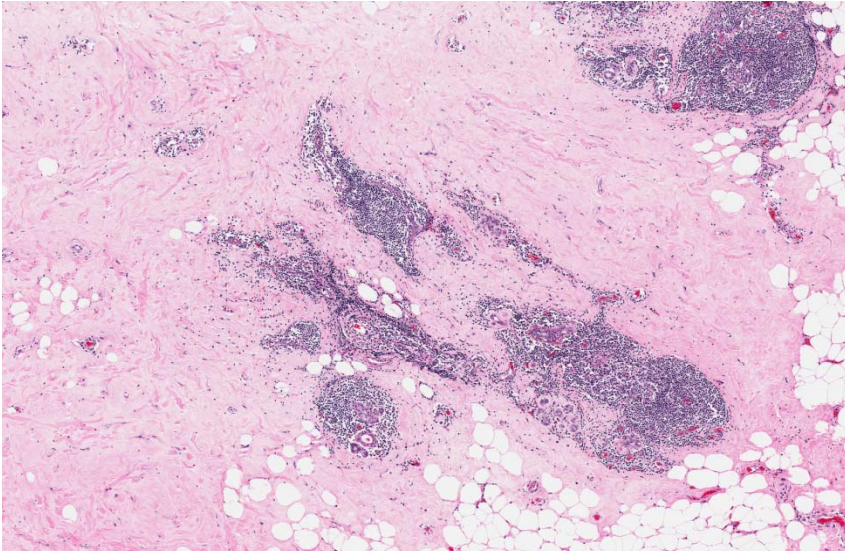
- 63 year old female was discovered to have a 5 cm suspicious breast mass.
- Previous biopsy showed mastitis.

(contributed by Dr Gary Tse)

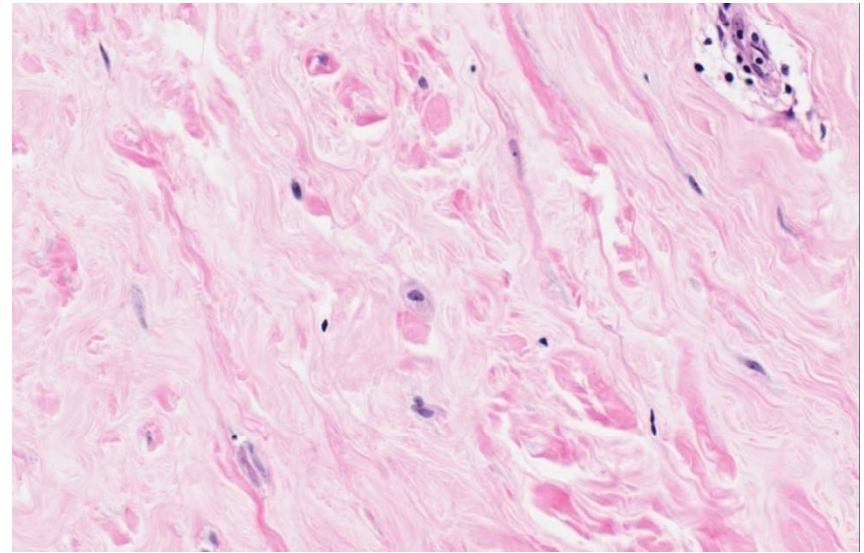
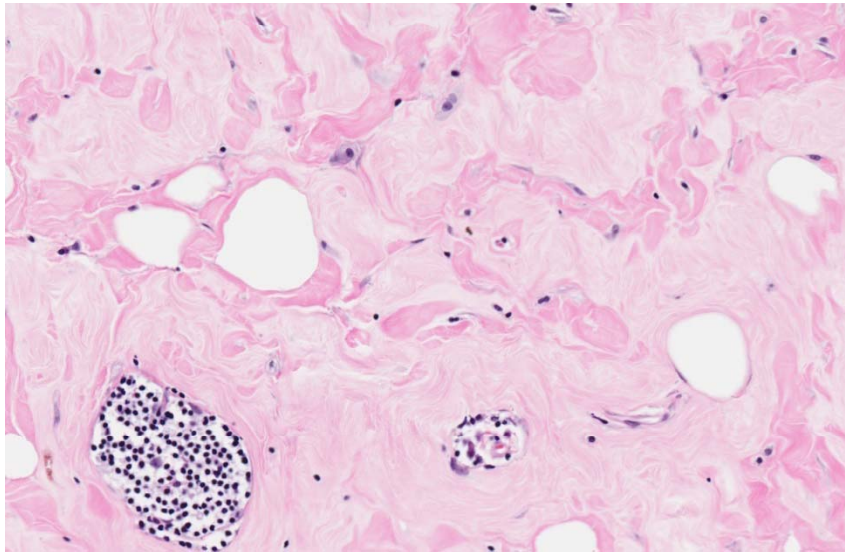
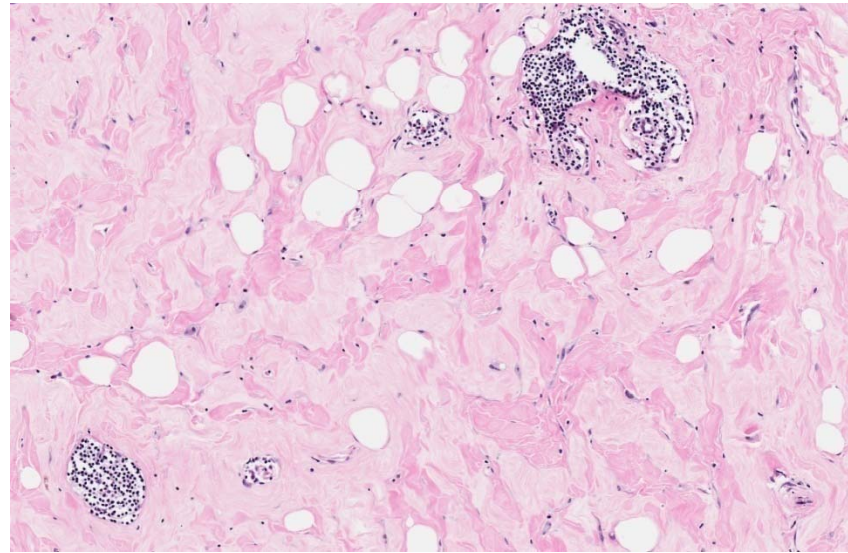
Set D.7



Set D.7



Set D.7



- Diabetic mastopathy

Key Histological findings

- Lymphocytic lobulitis.
- Perivascular lymphocytic infiltrates.
- Keloidal fibrosis.
- Epithelioid myofibroblasts.

Diabetic Mastopathy

- 1st noted in 1984 as a fibrous tumour-forming stromal proliferation in patients with diabetes mellitus.
- Term “Diabetic mastopathy” used in 1992 by Tomaszewski et al (*Hum Pathol* 1992; 23: 780-786).

Pathogenesis

- Glycosylation and increased intermolecular cross linkages in diabetics render collagen resistant to degradation.
- Possible manifestation of HLA-associated autoimmune disease.

Diabetic Mastopathy: *Clinical Presentation*

- Affects mostly females; rare in men.
- Majority Type I diabetes mellitus.
- Sometimes Type II DM, rarely in thyroiditis, hypothyroidism, or asymptomatic.
- Time interval between onset of DM and discovery of breast lesion averages 20 years.
- Age range 19 to 63 years.

Diabetic Mastopathy :

Clinical Presentation

- Physical examination:
 - Palpable, firm-to-hard tumour in one or both breasts.
 - Ill-defined and non-tender.
 - Mimics cancer.
- Mammography:
 - Increased density; mass resembling carcinoma or fibroadenoma.
- Spontaneous regression and clinical disappearance have been reported.

Diabetic Mastopathy : *Gross pathology*

- Lesions measure 2 to 6 cm.
- Palpable distinct firm or hard mass.
- Cut sections:
 - Homogeneous white to pale grey tissue that may be trabeculated.
 - Often indistinguishable from adjacent fibrous parenchyma.

Diabetic Mastopathy :
Microscopic pathology

- Collagenous stroma with keloidal features.
- Polygonal epithelioid cells.
- Mature lymphocytes circumferentially surround small blood vessels and TDLU.
- B cell phenotype.

- Core biopsy is reliable for establishing diagnosis.
- FNAC can be used to monitor patients with recurrent lesions.
 - Recurrence rate reported as 32% by Ely et al (Am J Clin Pathol 2000; 113: 541-545).
- Patients can develop breast carcinoma, hence any mass that subsequently occurs has to be subjected to diagnostic assessment.

Diabetic Mastopathy : *Prognosis & Treatment*

- Self-limited stromal abnormality of premenopausal women.
- Recurrences usually in ipsilateral breast.
- Asynchronous/synchronous bilateral involvement can occur.
- Excision biopsy is adequate.
- No evidence of predisposition to breast cancer or stromal lesions like fibromatosis.

Learning points

- Recognition of features of diabetic mastopathy.
- Identification of previous biopsy changes.