amyloid stains failed to show characteristic changes of CADA-SIL or cerebral amyloid angiopathy (CAA). Further history revealed a protean disorder with first onset of symptoms ~20 years prior. Symptoms included retinal disease, avascular necrosis of the femoral head, stage IV chronic kidney disease, telangiectasia and Raynaud's phenomenon, some of which were attributed to scleroderma, and a recent history of deranged LFTs and chronic iron deficiency from colonic angiodysplasia. A family history of early onset dementia was noted in the patient's father. A presumptive diagnosis of a familial cerebral microangiopathy was made with strong clinical and pathological suspicion that the patient had retinal vasculopathy with cerebral leukodystrophy/hereditary endotheliopathy with retinopathy nephropathy and stroke (RVCL/HERNS). Genetic testing for *TREX1*, the three prime exonuclease repair gene implicated in this condition was performed and identified a novel and *de novo* mutation: loss of 11 nucleotides at c.929-939 leading to a substitution of glutamic acid for alanine at amino acid 310 and subsequent frame shift.² The prognosis of RVCL/HERNS is poor, with onset of neurological symptoms leading to death within 7–10 years. Recognition of suspected hereditary cerebral microangiopathies warrants genetic screening and has important implications for genetic counselling.

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A CASE REPORT OF INVASIVE DUCTAL CARCINOMA OF THE BREAST WITH PROMINENT SEBACEOUS DIFFERENTIATION

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Background: Sebaceous carcinoma of the breast is a rare entity. Sebaceous carcinoma is defined as a breast carcinoma with prominent sebaceous differentiation in no less than 50% of cells (WHO, 2012). Limited data is available regarding the significance of sebaceous differentiation.

Aim: To present a case of diagnostic interest.

Method and results: We present a case of a 77-year-old woman with a left breast mass. After an initial core biopsy she underwent a mastectomy with sentinel lymph node biopsy. Histopathology confirmed an invasive ductal carcinoma with prominent sebaceous differentiation. The tumour was ER-positive/PR-positive/Her2-equivocal, and sentinel lymph nodes were negative for malignancy.

Discussion: The proportion of tumour cells with sebaceous differentiation was approximately 50%. The differential diagnosis included carcinoma with apocrine differentiation, lipid-rich carcinoma, and liposarcoma. A review of the available literature highlights the scarcity of knowledge about sebaceous carcinoma. Very little is understood about the clinical course and prognosis, and follow up data is limited. There is an association in the cases reported to date with high grade tumours and high mitotic counts,

and the predominant type of associated breast cancer is ductal. Reported metastases have been late in onset and at sites less typical for breast malignancies. The prognostic significance of sebaceous differentiation is uncertain, and further research is warranted.

VITREOUS HYALOCYTES OF THE ADULT HUMAN EYE: A HISTOLOGICAL AND IMMUNOHISTOCHEMICAL STUDY

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Aims: Vitreous hyalocytes are thought to be the resident immune cells of the vitreous and are also thought to contribute to regulatory roles in order to maintain immune privilege in the eye. This study aims to characterise the roles and functions of vitreous hyalocytes in normal adult human eyes.

Methods: 6 normal adult human eyes were sectioned horizontally through the macula region and stained with CD68, CD163 and HLA MHC Class II (DP, DQ, and DR) antibodies. The sections were studied using light microscopy at high power fields (×40 magnification).

Results: Vitreous hyalocytes are readily found in adult human eyes. CD163 appears to be a reliable marker of vitreous hyalocytes, irrespective of location, whereas CD68 is rarely expressed. HLA and CD68 co-expression by vitreous hyalocytes may mark an immunophenotypic change associated with ageing.

Conclusions: Vitreous hyalocytes appear to be intimately associated with cortical vitreous fibres and the inner limiting membrane of the retina suggesting they are likely to be involved in vitreoretinal pathologies and disease processes.

THE PATHOLOGIC FINDINGS OF DISTAL INTESTINAL OBSTRUCTION SYNDROME, A COMMONLY OCCURRING BUT RARELY DESCRIBED COMPLICATION OF CYSTIC FIBROSIS

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This case report describes the pathologic features of distal intestinal obstruction syndrome (DIOS) in a 46-year-old man with cystic fibrosis. As the life expectancy for patients with cystic fibrosis continues to improve, adult pathologies related to this disease are being encountered with increased frequency, but with little guidance for the pathologist as to the expected gross and microscopic features. DIOS is the leading cause of bowel obstruction in adult patients with cystic fibrosis and not uncommonly proceeds to surgical resection; however, descriptions of the pathologic findings expected are difficult to come by both within textbooks and the primary literature. In this case, the macroscopic findings were of tenacious faecal material filling the ascending colon, and a white pseudomembrane-like material adherent to the colonic mucosa. The chief microscopic finding was of a striking inspissated mucin distending and plugging