A 70 year old Caucasian female was referred to the Centre, complaining of poor vision. She reported having had ‘surgery several years ago on both eyes to decrease her dependence on glasses’. This case will focus on her left eye only. Acuity in this eye was 6/12, lower than would be expected with the degree of nuclear sclerosis noted. What is the procedure this patient had, and what is the cause of the reduced vision in this eye?
The patient had conductive keratoplasty (CK), a procedure introduced in 2002 which aims to correct low hyperopia (ideally around +1.50D), or reduce the dependence on reading glasses for presbyopes. In this procedure, the cornea is treated with low level radio-frequency energy in specific areas of the peripheral cornea. The areas treated contract in response, causing a steepening of the cornea thereby reducing hyperopia and/or creating a small amount of myopia to assist with reading. There is typically some regression with time, the procedure often may need to be repeated and is not currently widely used.

The reduced vision, however is caused by likely choroidal neovascularisation at the macula. While the retinal photo does not show marked abnormalities, the OCT line scan show the presence of sub-retinal and intra-retinal fluid, general retinal disorganisation as well as fibrosis, indicative of CNV. This case illustrates the value of OCT imaging in assisting the timely detection of eye disease.