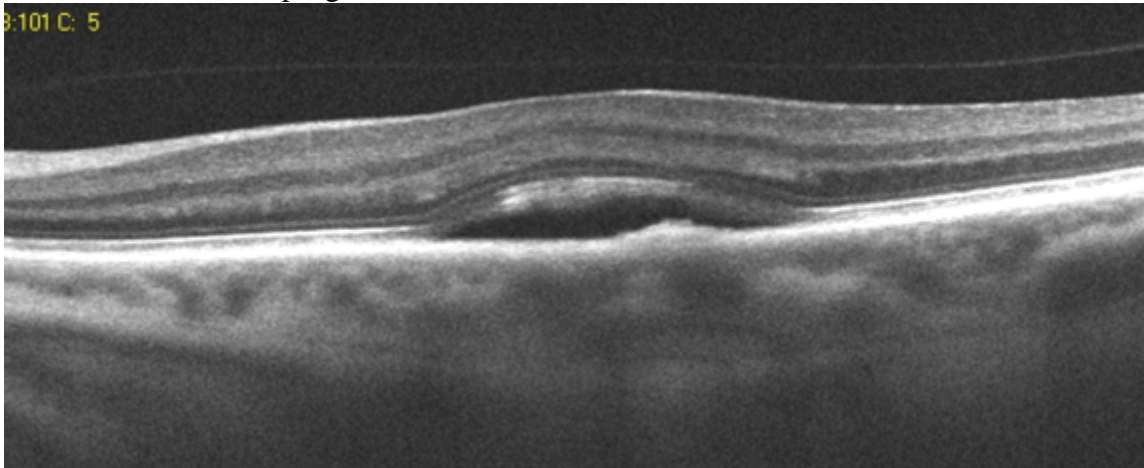


## Serous Pigment Epithelial Detachment

A serous pigment epithelial detachment often causes visual distortion and loss of vision. It is due to elevation of the retina due to a collection of fluid beneath the retina.

The prognosis for these detachments depends on the underlying disease process. 1/3 of them resolve over 2-3 years. The retina overlying them then becomes atrophic. The vision usually is maintained at no worse than 2 lines of the vision chart less than the present vision.

If present in younger patients, it may be part of central serous retinopathy and has a good prognosis. If, however, older persons develop serous pigment epithelial detachment there is the likelihood for the development of underlying sub-retinal neovascular membrane in one third to one half of patients. This leads to a worse prognosis for vision.



The size of the pigment epithelial detachment is important in determining the likelihood of sub-retinal neovascular membrane development, with smaller detachments less likely to harbour underlying neovascular growth.

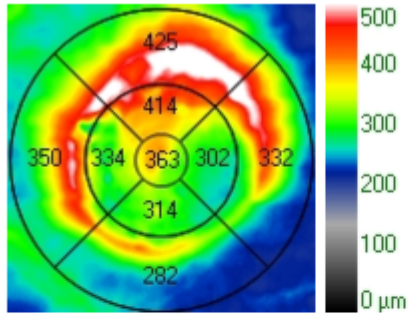
### Treatment

Although laser Photocoagulation may flatten a detachment, no beneficial effect from laser therapy has been shown in the absence of sub-retinal neovascular membrane. Even in their presence it is often not possible to treat the sub-retinal neovascular membrane. Photodynamic Therapy has not shown to be effective if there is a pigment epithelial detachment present. A Study performed by Miss Hope-Ross in Birmingham showed that her results of treating these lesions with the aid of Indocyanine Green as well as Fundus Fluorescein Angiogram, was uniformly poor. ¼ of patients she says developed what is called a Retinal Pigment epithelium Rip and the remainder developed persistent or recurrent choroidal neovascularisation. She has abandoned treating retinal pigment epithelial detachments with conventional laser treatments.

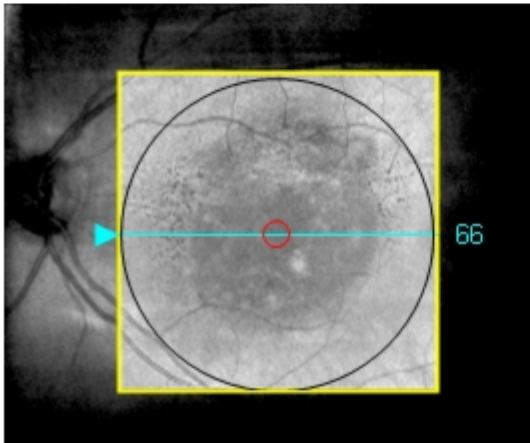
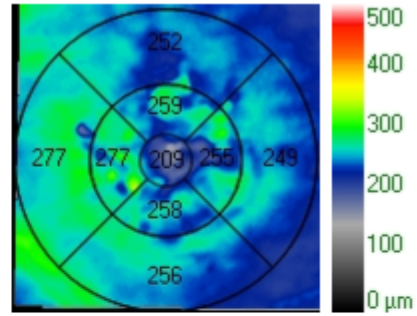
Below is a patient with a very large pigment epithelial defects with vision of 0.4 (6/18) and after 6 Lucentis injections her vision improved to 0.16 (6/9). The cyst has completely gone and all fluid settled. This is an amazing result.

The risk of large pigment epithelium detachments is that they rip or pop like a balloon. This collapses the cyst and the retina rolls up as a result. If this occurs in the very centre of the vision, then the vision can be badly affected, if to one side which is usual then this terminates very often the wet Age related macular degeneration process and the vision stabilises. There is still debate around whether the Lucentis injections result in an increase rate of Retinal pigment epithelial rips or not.

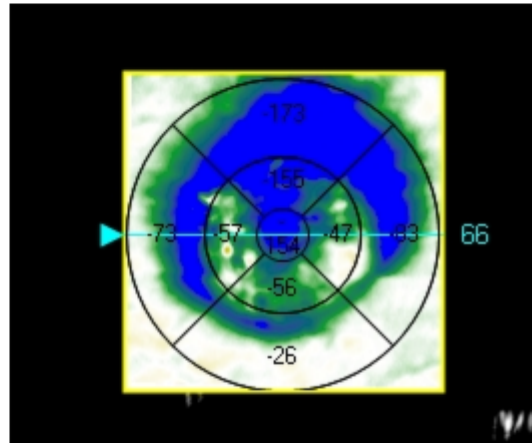
Before treatment



After treatment

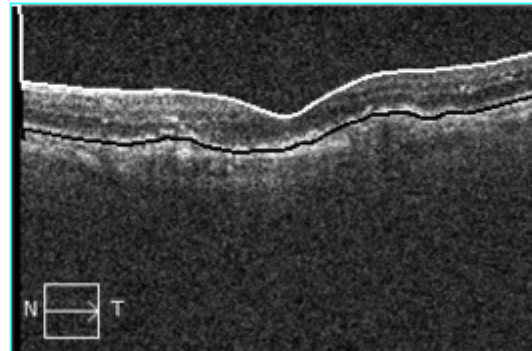
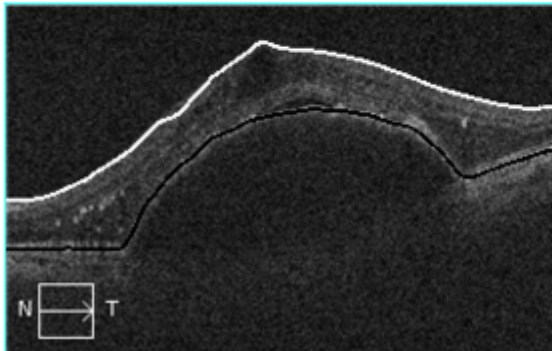


Overlay: OCT Fundus Transparency: 0 %

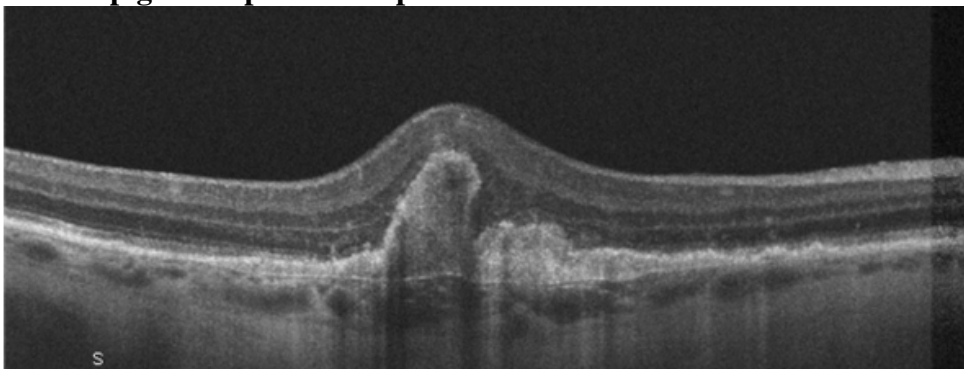


Overlay: ILM-RPE Difference Transparency: 0 %

Extracted B-Scan



### Retinal pigment epithelial Rip



Above is an example of an Retinal pigment epithelial rip. The cyst has gone but the retina can be seen to have rolled up. Also no active wet Age related macular degeneration is present.

### Prognosis for the other eye

Pigment epithelial detachments occur more commonly in eyes with drusen present. The risk of developing in the other eye is 37% at one year, 59% at two and 80% by 3 years.

### **Vitamins - Antioxidants and Zinc and Lutein**

While these are well show to be of benefit in Age Related Macular Degeneration their protective effect in this condition is unknown. However I would recommend that you take them.

Mr. Nicholas Lee 2011

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