The Clinical Application of Optical Coherence Tomography: An Orthoptist’s Perspective.

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Optical Coherence Tomography (OCT)

- Relatively new type of diagnostic imaging.
- Enables performance of high-resolution cross-sectional imaging of internal microstructure of the eye.
The value of OCT

- Ability to evaluate real-time in situ visualisation of ocular structures.
- No need for biopsy.
- Useful adjunct to clinical techniques:
  - Slit-lamp biomicroscopy
  - Indirect ophthalmoscopy
  - Fluorescein angiography
  - Visual field testing
OCT and the orthoptist
Interpreting an OCT image

Schuman, Puliafito & Fujimoto, 2004
The normal OCT

Schuman, Puliafito & Fujimoto, 2004
Interesting abnormal OCT scans
Interesting abnormal OCT scans

Image courtesy of Eye Surgery Associates - Melbourne
Image courtesy of Eye Surgery Associates - Melbourne
The role of OCT in monitoring outcomes of Avastin and Intra-vitreal Triamcinolone Therapy
Patient: Mrs C
80y/o

OCT pre Avastin

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mrs C
80y/o

OCT 4/52 post Avastin

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mrs S 86y/o

OCT pre Avastin

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mrs S 86y/o

OCT 5/52 post Avastin

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mrs S 86y/o

OCT 7-8/52 post Avastin

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Patient: Mrs S 86y/o

OCT 4/52 post 2nd Avastin

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OCT pre Avastin

Patient: Mr A
81y/o

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mr A
81y/o

OCT 6/52 post Avastin

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mr I
46y/o

OCT pre IVTA

Image courtesy of Eye Surgery Associates - Melbourne
OCT 4/52 post IVTA

Patient: Mr I
46y/o

Image courtesy of Eye Surgery Associates - Melbourne
OCT pre IVTA

Patient: Mrs W 67y/o

Image courtesy of Eye Surgery Associates - Melbourne
Patient: Mrs W
67y/o

OCT 4/52 post IVTA

Image courtesy of Eye Surgery Associates - Melbourne
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