

The Use of Ultra Wide Field Fluorescein Angiography in Evaluation and Management of Uveitis

Andrew Kaines , Irena Tsui , David Sarraf and Steven D. Schwartz

Retina Division, Jules Stein Eye Institute, University of California, Los Angeles

Figure 1. 42 year old female with CMV retinitis



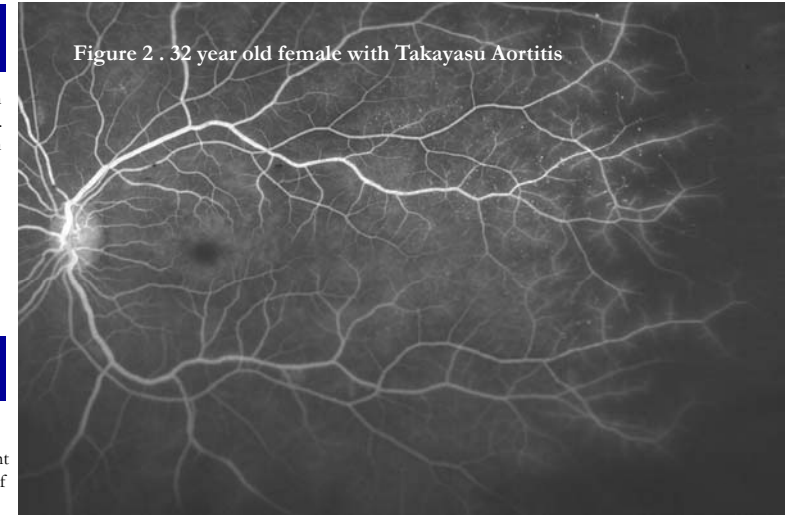
Purpose

Appropriate diagnosis and subsequent management in Uveitis can depend on elucidation of the clinical signs. Many diagnostic features are often best identified with Fluorescein angiography. However these signs are often peripheral and visualization can be difficult with traditional angiography. Optos ultra wide field scanning laser ophthalmoscope (Optos Panoramic 200; Optos PLC, Dunfermline, Scotland, United Kingdom) performs ultra wide angle fluorescein angiography¹ and its benefit in uveitis was reviewed.

Methods

The Jules Stein Eye Institute imaging database identified 26 cases of posterior uveitis who underwent wide-field imaging. In these cases the relative merits of this imaging was reviewed.

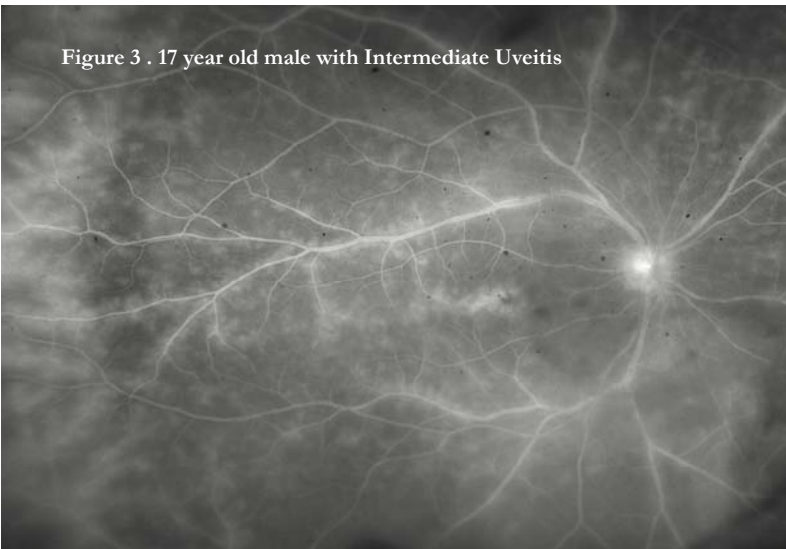
Figure 2 . 32 year old female with Takayasu Aortitis



Results

Ultra wide field imaging was found to have 4 benefits. These were 1. Objective measurement of disease progression (Figure 1 shows cytomegalovirus retinitis in which it has been previously reported that photographic documentation of progression / response to treatment is more accurate than clinical drawing²). 2. Precise identification of peripheral signs (Figure 2 Takayasu Aortitis). 3. Objective documentation of disease severity (Figure 3 of Idiopathic Intermediate Uveitis in which clinical signs were mild, however imaging showed more severe disease. 4. Planning treatment (Figure 4 of Systemic Lupus Erythematosus Vasculitis in which the area for Argon laser was carefully mapped following clear angiographic visualization of neovascularization and ischemia).

Figure 3 . 17 year old male with Intermediate Uveitis



Conclusions

In conclusion, Optos ultra wide field fluorescein angiography may have substantial benefit over traditional angiography in uveitic patients.

References

1. Manivannan A, Plskova J, Farrow A. Ultra-wide-field fluorescein angiography of the ocular fundus. Am J Ophthalmol 2005;140:525-527.
2. Migdal C. Funduscopy versus photographic assessment of cytomegalovirus retinitis progression: a clinician's perspective AIDS. 1996;10:19-23.

Figure 4 . 47 year old female with SLE vasculitis

