

## **SS-OCT angiography of autologous RPE and choroidal transplantation for exudative maculopathies.**

Parolini B, Finzi A, Pinackatt S, Besozzi G, Cardillo D, Baldi A, Di Salvatore A.

Ophthalmology Unit, Ospedale Sant'Anna, Brescia, Italy

### **Purpose**

To describe the SS-OCT angiography (SS-OCTA) patterns observed in patients who underwent autologous transplantation of a Retinal Pigment Epithelium (RPE)-choroidal patch and to evaluate the ability to detect patch revascularization, in comparison with the data provided by fluorescein and indocyanine green angiography.

### **Methods**

SS-OCT angiography was performed on some patients with choroidal neovascularization who underwent autologous RPE-choroidal patch. The patients had clinically active disease with rapid progression at the time of surgery, with a preserved outer retina. The patch was visualized by enface images generated from the outer retina and choriocapillaris. Comparison with fluorescein angiography and indocyanine green (Heidelberg Engineering) is provided.

### **Results**

SS-OCT B-scan showed an RPE-choroidal patch under the macula, with fluid accumulation and dilatation of choroidal vessels. SS-OCTA revealed perfusion and dilatation of vessels in the choroidal bed of the patch since the early follow-up. In patients with later follow-up, when complete vascularization was achieved, feeder-vessels seemed to be visible at the margin of patch by indocyanine green. This detail appeared more difficult to evaluate with OCT angiography, due to the presence of artifacts resulting from the signal of the superficial and deep retinal vessels.

### **Conclusion**

SSD-OCT angiography is a non-invasive technique that could be useful to study the vascularization of autologous Retinal Pigment Epithelium and choroidal patch during the follow-up.

Financial Disclosure: The authors have no financial interests.

Figure 1: Fluorescein angiography and indocyanine green of a patient who underwent autologous transplantation of RPE-choroidal patch.

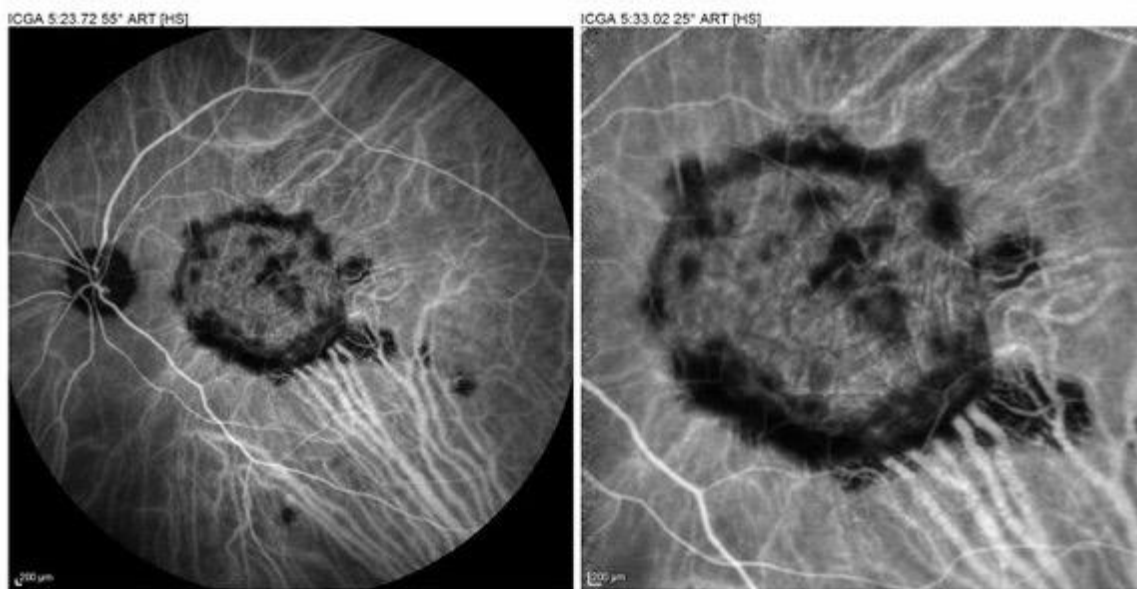


Figure 2: SSD-OCT angiography of the same patient

