

BACKGROUND

Enhanced depth imaging optical coherence tomography (EDI-OCT) is a novel imaging modality that has helped retina specialists learn more about the choroid's role in the eye. For Orthoptist, as a health professional that develops teamwork with the specialists, it is extremely important to know about higher resolution images and improved imaging acquisition of lesions that EDI-OCT provides. This poster summarizes the EDI-OCT findings between two clinical entities: Choroidal Metastasis VS Choroidal Nevus.

CHOROIDAL METASTASIS

- ✓ Female, 67 years;
- ✓ Complaints of intermittent vertical binocular diplopia for 3 weeks;
- ✓ Lung neoplasia with brain and cranial metastasis (1,5 months ago to metastatic found);
- ✓ Chemotherapy cycles (last time 1 year ago) + immunoncology and radiotherapy located at the lung;
- ✓ Magnetic Resonance Imaging of the Orbits demonstrated the involvement of eye extraocular muscles mainly the inferior and medial rectus of the right orbit + medial rectus of the left orbit;
- ✓ Vertical manifest deviation in right eye (R/L);
- ✓ Ocular funduscopy revealed inferior temporal choroidal lesion compatible with metastasis in left eye.

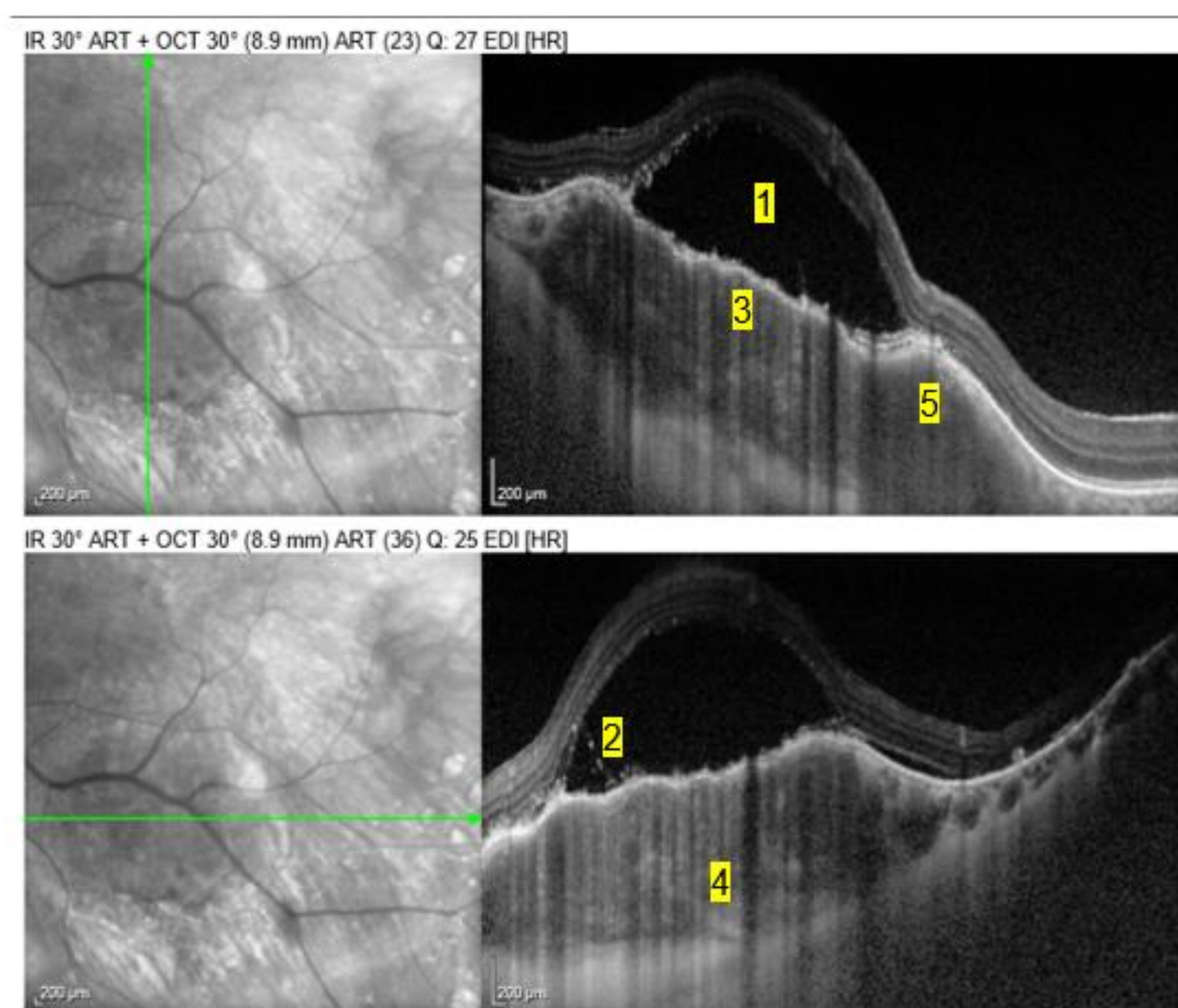


Figure 1 – EDI-OCT of the horizontal and vertical lines scans centered on the metastasis body in the left eye.

EDI-OCT findings:

- 1 – Subretinal fluid overlying a hyperreflective;
- 2 – Subretinal debris such as macrophages with lipofuscin;
- 3 – Lumpy-bumpy contour;
- 4 – Optical shadow;
- 5 – Choriocapillaris compression.

CHOROIDAL NEVUS

- ✓ Female, 51 years;
- ✓ Complaints of visual alteration left eye with 3 months of evolution;
- ✓ Ocular funduscopy revealed a poorly pigmented lesion inferior to the fovea with approximately 2 optic disc diameters, without drusen or associated pigment;
- ✓ Choroidal lesion not measurable on ophthalmic echography;
- ✓ Remaining eye exam without changes.

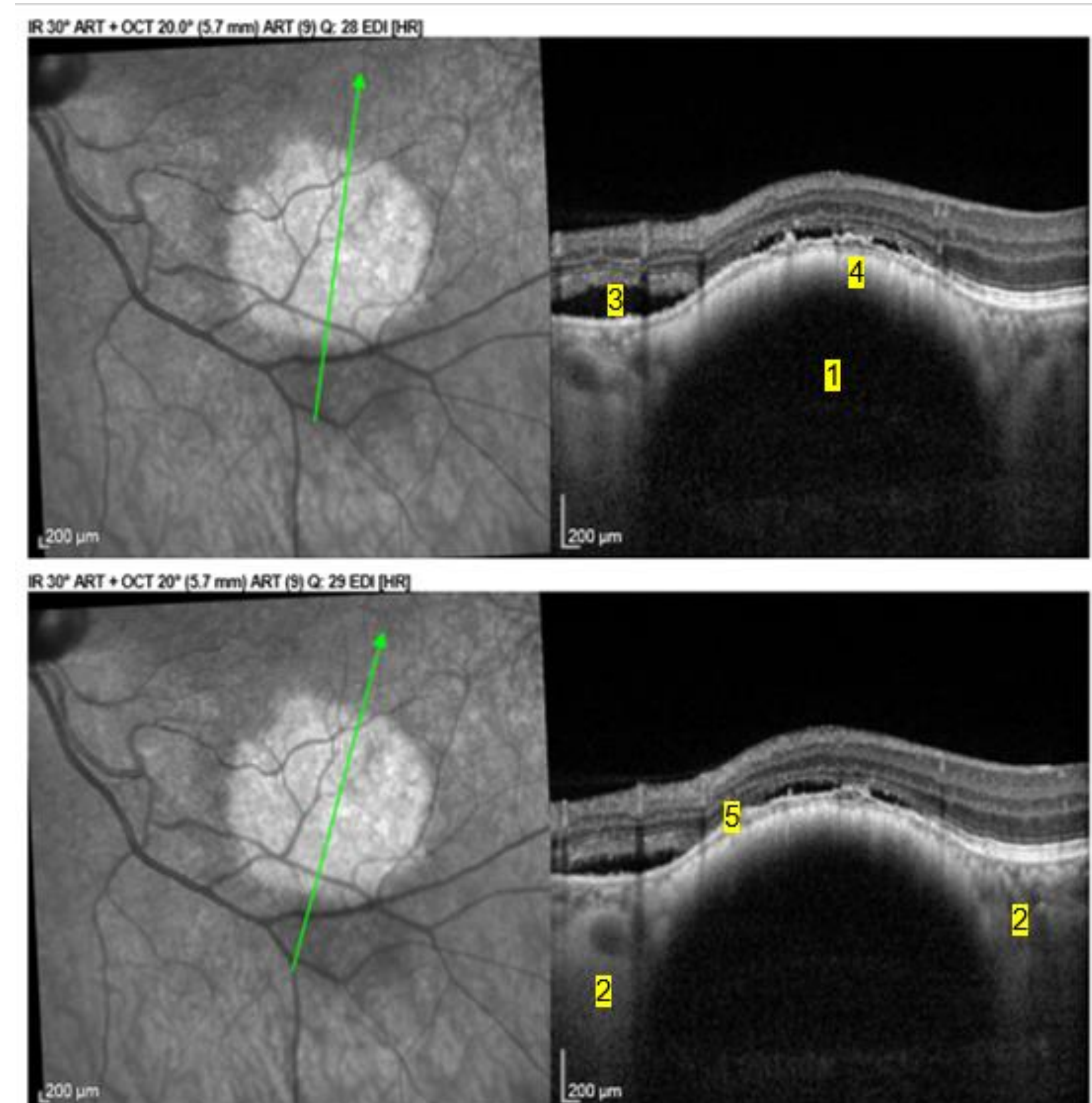


Figure 2 – EDI-OCT radial scans crossing to centered on nevus in the left eye

EDI-OCT findings:

- 1 – Choroidal shadowing;
- 2 – Choriocapillaris compression;
- 3 – Fluid subretinal;
- 4 – Focal detachments of the overlying Retinal Pigment Epithelium (RPE);
- 5 – Irregularity of the photoreceptor inner segment/outer segment (IS/OS) junction (**shaggy photoreceptors**).

CONCLUSIONS

Through the Orthoptist's know-how, it is his technical competence to acquire OCT images with EDI whenever alterations that refer to choroidal anomalies are visualized. Even if they are minor alterations without any type of malignancy, with the acquisition of tomographic sections it will be possible, a posteriori, to compare results in the measurements of thickness and aspect of the lesion.