**PACLITAXEL RETINAL TOXICITY ON OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY**

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**Introduction:** Paclitaxel is a chemotherapeutic agent commonly used in the treatment of malignant tumors such as breast and ovarian cancer, among others. As a taxane derivative, its effect mechanism shows antineoplastic effect by restricting microtubulemobility and inhibiting mitosis. Bilateral cystoid macular edema has been described as a rare adverse event during the administration of taxanes. Once suspected, fluorescein angiography (FA) and optical coherence tomography (OCT) are still the gold standard ancillary tests to diagnosis this condition. Despite discontinuation of the drug may improve visual acuity, irreversible vision loss after prolonged use of Paclitaxel have been reported.

**Purpose:** OCT angiography (OCTA) is a novel, non-invasive method of imaging the retinal vasculature. Images are acquired rapidly, with no associated side effects, offering advantages over FA. Because of this, it is expected that OCTA could be used for high-volume applications in the future such as the routine screening and follow up of a wide range of retinal diseases. The authors report a case of bilateral cystoid macular edema secondary to paclitaxel therapy imaged with OCTA.

**Methods:** A 60-year-old woman with medical history of breast cancer metastatic presented with a three-month history of progressive blurred vision in both eyes. The patient was on paclitaxel 80 mg/m2 weekly for one year combined with transtuzumab and pertuzumab therapies. Complete ophthalmologic examination and OCTA were performed at baseline presentation and monthly follow up was performed.

**Results:** Visual acuities (VA) were 20/100 on the right and 20/70 on the left. Retinal examination revealed bilaterally absent foveal reflexes. Spectral domain OCT cross-sectional scans showed bilateral foveal thickening associated with cystic intraretinal fluid accumulation. Enface view allowed the delineation of outer retina abnormalities. OCTA showed normal flow within the superficial and deep macular plexuses of both eyes.Based on the above findings, diagnosis of retinal toxicity secondary to paclitaxel was made.

Sixty days after the discontinuation of paclitaxel alone, VA loss was partial recovered and macular edema resolved.

**Conclusion:** Enface view and microvascular information of the retina and the underlying choroid allowed the correct diagnosis of retinal toxicity in a patient receiving combined chemotherapy.

**Keywords:** Paclitaxel; macular edema; OCT Angiography.