Purpose: In this case series we aim to evaluate clinical, angiographic and optical coherence tomographical characteristics in patients with idiopathic juxtafoveal telangiectasis (IJT) and therapeutic effect of intravitreal bevacizumab injection when applied for macular edema.

Methods: Two patients with Type 2 (bilateral perifoveal) telangiectasis and 2 patients with Type 1 perifoveal aneurysmal telangiectasia according to Yanuzzi classification were evaluated clinically and angiographically (FA). All eyes were imaged using spectral domain optical coherence tomography (OCT).

Results: Patient age ranged between 48 to 75 years. Mean follow-up time was 9 months. Mean best corrected visual acuity (BCVA) at presentation was 4/10 in Type 1 eyes, 5/10 in Type 2 eyes at presentation. One of Type 1 eyes was pseudophakic. Fundoscopy revealed hypopigmentation temporal and nasal to fovea in Type 1 eyes which corresponded to focal capillary telangiectasis and minimal staining in FA. Type 2 eyes showed grayish discoloration temporal to fovea with retinal pigment epithelial (RPE) plaque, atrophy secondary to subretinal neovascularisation and minimal capillary telangiectasis. OCT revealed cystlike structure in the fovea and within internal retinal layers, central intraretinal plaques, fluid accumulation, pigment migration, atrophy and thickening of RPE layer and disorganisation of outer retinal layers. Two eyes received intravitreal bevacizumab for macular edema with beneficial visual and anatomical response.

Conclusion: Idiopathic macular telangiectasia has characteristic fluorescein angiography and OCT findings corresponding to disturbance of structural integrity of retinal layers and RPE. Follow-up is needed since pathologic progression may necessitate therapeutic intervention.