POLYPOIDAL CHOROIDAL VASCULOPATHY – IS INDOCYANINE - GREEN ANGIOGRAPHY ESSENTIAL FOR DIAGNOSIS?
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Purpose: To determine the sensitivity and specificity for polypoidal choroidal vasculopathy (PCV) diagnosis without assessing indocyanine-green angiography (ICGA) images. Methods: Local database was assessed by one of the authors, who identified consecutive patients with newly diagnosed PCV or occult choroidal neovascularization (CNV). Only patients without previous ocular treatments which had baseline color fundus photographs, optical coherence tomography (OCT), fluorescein angiography (FA) and ICGA images were included. PCV diagnosis was assumed when polypoidal lesions were identifiable on ICGA. Baseline images were collected and organized by patient, blinding any identifying features. Thereafter, all but ICGA were provided to three other Ophthalmologists, which evaluated them independently. Results: One-hundred eyes were included, 53 occult CNV and 47 PCV. Considering diagnosis by graders when at least 2 of them agreed, the sensitivity was 68.09% (95% CI 55.88; 80.91) and the specificity 56.60% (95% CI 42.28; 70.16). Individual results significantly varied according to grader’s experience. 29% of the eyes had available Spectralis® HRA+OCT images, the remaining Cirrus® HD-OCT. The availability of Spectralis® was significantly associated with a higher rate of correct diagnosis (p=0.010). Three OCT findings [subfoveal (p=0.05) and extrafoveal polypoidal lesions (p=0.001) and notch at the margin of serous PED (p=0.034)] presented a positive predictive value of 100%. Conclusions: The sensitivity and specificity of PCV diagnosis without the concomitant use of ICGA was good, but influenced by graders’ experience and the type of available OCT. Doctors should be trained to identify the OCT features with higher positive predictive rates.