CM05 Correlating prostate imaging reporting and data system (PIRADS) version 2 scores with results of targeted biopsy of the prostate

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DOI: https://doi.org/10.26800/LV-145-supl2-CM05

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KEYWORDS: biopsy; mpMRI; prostate cancer

INTRODUCTION/OBJECTIVES: Targeted prostate biopsy using multiparametric magnetic resonance imaging (mpMRI) has become a valuable addition to the standard systematic transrectal ultrasonography biopsy. Suspicious lesions on mpMRI are graded using the PIRADS scoring system. In our institution, patients with PIRADS 3-5 undergo a targeted biopsy in addition to the systematic 12-core biopsy. This study aims to provide data on the correlation between PIRADS score and clinically significant prostate cancer (csPCa), i.e. cancers with a Gleason score of 3+4 or higher.

MATERIALS AND METHODS: This is a retrospective study of patients with PIRADS 3-5 who underwent a targeted+systematic prostate biopsy in our institution between 2018 and 2022.

RESULTS: A total of 743 patients underwent a targeted biopsy in this time period. There were 394 (53.1%) positive biopsies, 66.4% of which were diagnosed with csPCa. Of 340 PIRADS 3 lesions, 35.6% were positive, 45.1% of which were csPCa. Of 257 PIRADS 4 lesions 61.1% were positive, and 72.6% were csPCa. Of 133 PIRADS 5 lesions 85% were positive, 80.5% of which were csPCa. In the PIRADS 5 category there were only 1.8% negative targeted biopsies in patients with positive systematic biopsy while 13.3% had positive targeted cores with negative systematic biopsy.

CONCLUSION: This study demonstrates that the diagnosis of csPCa increases with higher PIRADS scores. More data on the correlation between csPCa and mpMRI findings may reduce both the overdiagnosis of clinically insignificant prostate cancer and the risks of performing unnecessary prostate biopsies.

CM06 Dry eye disease and phacoemulsification cataract surgery

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DOI: https://doi.org/10.26800/LV-145-supl2-CM06

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KEYWORDS: cataract; dry eye disease; phacoemulsification; visual acuity

INTRODUCTION: Dry eye disease (DED) is a multifactorial disease of the ocular surface with contributing factors including tear film instability, hyperosmolarity, and inflammation. Cataract surgery can impact visual acuity recovery by contributing to and prolonging corneal restitution. This prospective cohort study aims to investigate the best corrected visual acuity (BCVA) after phacoemulsification cataract surgery (PHACO) in patients with DED.

MATERIALS AND METHODS: 60 patients with cataracts were divided into two groups; the first group of 29 patients had healthy corneal surfaces, while the other (31 patients) had DED, and all underwent PHACO surgery. Before and 30 days after surgery, all patients underwent ophthalmic examination including corneal fluorescein staining (fl), tear film break-up time test (TBUT), and the BCVA assessment. DED was defined with a positive fl test and TBUT< 5 mm. All patients had PHACO surgery with intraocular lens implantation performed by the same surgeon using the Infinity (Alcon 2008 device).

RESULTS: The mean age of patients was 76 ± 7 . Most of the patients were females (52%) versus males (48%), with no statistically significant difference between gender. There was a statistically significant improvement (Wilcoxon test, p< 0,001) in BCVA after surgery in both groups. TBUT tests before and after surgery were significantly higher in the control group than in the DED group. There were significantly more positive results of the fl test after surgery in both groups (Wilcoxon test P & lt; 0,001).

CONCLUSION: DED influences corneal tear film tests after uncomplicated phacoemulsification cataract surgery, but doesn't significantly impact postoperative BCVA.