Role Of MR Guided Biopsy In Pca

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Systemic transrectal ultrasound-guided biopsy (TRUS-GB) is the standard procedure for diagnosing prostate cancer (Pca), but reveals a limited accuracy for the detection of cancer, with up to 30% false negative findings. Currently, with improved accuracy of multiparametric MR imaging (mpMRI), the role of mpMRI has been shifted from tumor staging to detection, characterization and guidance for biopsy. MR guided biopsy (MR-GB) in patients with suspected Pca has better sensitivity for clinically significant cancer (91% versus 76%), and less significant cancer detection (about two-fold) compared with TRUS-GB. MR-GB has three different techniques: cognitive fusion, MRI-TRUS fusion and in-bore fusion. These diagnostic advances using MR-GB has improved patient risk stratifications and management strategies. This presentation introduces the MRGB technique for Pca detection and discusses its current issues and further directions.