PRESENTATION 6

EVALUATE CURRENT DIAGNOSTIC ACCURACY OF TRANS-PERINEAL(TP) PROSTATE BIOPSY AND MP MRI PRACTICE AT THE PRINCESS ROYAL UNIVERSITY HOSPITAL (PRUH),UK

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Introduction:

Multiparametric MRI imaging (mpMRI) and TP prostate biopsy are increasingly being recognised as diagnostic tools to those with clinical suspicion of prostate cancer. It is important to ensure standards met according to current guidelines during imaging and biopsy.

Methods:

A cross-sectional retrospective reviewing of electronic records of all patients undergoing a TP biopsy at the PRUH from September to December 2018. Results collected and analysed using both descriptive and statistical analysis.

Results:

The mean age was 64.1, mean PSA 9.1 ng/ml, mean MRI prostate size of 53.7cc and mean PSA density 0.22 ng/ml per c.m 3. Total of 151 TP biopsies were performed and 89 (59%) were malignant. 57(38%) had PIRAD 2 and 17 of PIRADS 2 had clinically significant disease. 42(47%) Gleason 3+3,28 (31%) 3+4, 12 (12%) 4+3, 2 (2.2%) each for Gleason 3+5, 4+4, 4+5 and 1 (1.1%) for Gleason 5+4. 3(2%) admitted to A&E with Urine retention. Both systematic and targeted biopsy was only performed in 15 of the 89 patients (17%). Concordance on mpMRI index lesion to histologically confirmed disease is seen only in 43% of cases.

Conclusion:

Diagnostic accuracy of PIRADS II reports is 54%(benign pathology), however when considering only clinically significant disease this increased to 71% which represents the NPV of a PIRADS II report. Looking at those with PIRADS IV+V reports 76% of these reports revealed malignant pathology (i.e. its PPV for malignancy). However, when looking at clinically significant disease this was significantly lower only in 44%.