

AB080. SOH21AS164. A prospective analysis of the patient experience and economic benefit of local anaesthesia transperineal prostate biopsy with the PrecisionPoint™ transperineal access system

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Background: This study aims to compare data on transperineal template biopsy (TPTB) under general anaesthesia (GA) compared to local anaesthesia (LA) procedures using the PrecisionPoint™ Transperineal Access System (PPTAS) in relation to its tolerability, rate of cancer detection as well as cost.

Methods: This is a prospective cohort study of patients undergoing transperineal biopsy at Western Health. Patients were excluded if they had concurrent flexible cystoscopy or had language barriers to follow-up phone calls. Patients had a choice of undergoing prostate biopsy under GA or LA. A prospective questionnaire on days 0, 1, 7 and 30 was applied. The primary outcome was patient tolerability. Secondary outcomes were cancer detection rate, complication rate, and theatre utilisation time.

Results: This study included 60 patients of whom 40 underwent GA TPTB and 20 who underwent LA PPTAS. Pain was significantly higher leaving recovery in the GA TPTB group ($P=0.0279$). The median pain score at LA infiltration was 4 (IQR3-6). There was no difference in pain

at day 1, 7 or 30 ($P=0.9361$, 0.1099 and 0.4955 respectively). The overall cancer detection rate was similar at 62.5% for GA TPTB and 50% for LA PPTAS ($P=0.3545$). Acute urinary retention (AUR) requiring catheterisation occurred in 5% of both groups ($P=1.000$). The GA TPTB cohort spent longer in theatre and in recovery ($P\leq 0.0001$).

Conclusions: This study demonstrates that transperineal prostate biopsy can be safely performed under LA with no difference between the cohorts in relation to the rate of cancer detection or AUR. LATP biopsy also consumed less overall theatre and recovery resources.

Keywords: Prostate cancer; PrecisionPoint™; transperineal; local anaesthetic; biopsy

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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