INTRODUCTION AND OBJECTIVE: Transperineal biopsy (TPbx) has been found to be feasible with equivalent cancer detection rate compared to transrectal ultrasound-guided biopsy (TRbx), however patient experience remains unknown. We aim to assess patient experience with in-office TPbx under local anesthesia within the Michigan Urological Surgery Improvement Collaborative (MUSIC).

METHODS: MUSIC is a physician-lead quality improvement consortium comprised of 90% of urologists in Michigan. From 3/2019 - 10/2019 patients at 4 MUSIC sites completed a survey assessing overall pain, pain during specific portions of the procedure, and willingness to undergo a repeat procedure if medically necessary. Experience was assessed using a validated visual analogue pain scale (VAS). Identical surveys were given to a control group of patients undergoing TRbx at a single site. Univariate analysis was used to compare responses between the groups.

RESULTS: A total of 190 TPbx and 150 TRbx responses were included. Mean VAS for overall experience was significantly higher for TPbx (3.74 vs 3.03, p=0.01) [Figure 1]. This was predominantly driven by greater discomfort during local anesthetic administration (3.77 vs 2.35, p<0.001) and positioning (0.99 vs 0.59, p=0.01) during TPbx. However, there was not significant variation in mean overall VAS across sites, or by provider within a single site subgroup analysis with the highest volume. Discomfort was greatest during TRbx during probe insertion (mean VAS 2.86). There was no significant difference between the groups with respect to probe insertion, prostate sampling or willingness to undergo a repeat procedure.

CONCLUSIONS: Men experience greater discomfort during TPbx when compared to TRbx though the absolute difference is small and of questionable clinical relevance. This was not related to minor differences in technique by site or provider. Anesthetic administration scores were similar between the groups suggesting adequate anesthesia. TPbx under local anesthesia is well tolerated and strategies aimed toward minimizing discomfort during administration of local anesthetic can improve patient experience during TPbx.

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