

ABSTRACT

COMPARISON BETWEEN TRANSRECTAL ULTRASONOGRAPHY GUIDED  
TRANSRECTAL PROSTATE BIOPSY AND TRANSRECTAL  
ULTRASONOGRAPHY GUIDED TRANSPERINEAL PROSTATE BIOPSY

**Introduction:** Carcinoma Prostate is the fourth most malignancy in men. TRUS guided transperineal prostate biopsy and TRUS guided transrectal prostate biopsy are two main approach to take prostate tissue as diagnostic of carcinoma prostate.

**Objective:** To compare prostate biopsy approach between TRUS guided transrectal prostate biopsy and TRUS guided transperineal prostate biopsy toward duration of examination, pain perception, and complications.

**Material and Method:** This study was experimental study with prospective approach. There were 2 groups, group I was performed TRUS guided transrectal prostate biopsy (TRB) and group II was performed TRUS guided transperineal prostate biopsy (TPB). Evaluation based on the duration of examination, pain perception, and complication. Data were analyzed using independent T test for duration of examination, Mann-Whitney test for pain perception. Data was performed using SPSS 21.0 version. The significant difference was considered if p value <0,05.

**Results:** There are 20 samples in this study. There was significant difference in the duration of examination, the average duration of examination of TPB ( $17.40 \pm 2.50$ ) longer than the duration of examination of TRB ( $14.1 \pm 2.77$ ). There was no statistical significant difference between TPB group and TRB group in pain perception when USG probe into the anal ( $p = 0,65$ ), anesthesia process ( $p = 0,28$ ), prostate tissue sampling ( $p = 1,00$ ), and post biopsy ( $p = 0,34$ ). Rectal bleeding was the most complication in TRB group (40%) compare to TPB group (0%). Hematuria experienced by three patients (30%) in TRB group and two patients (20%) in TPB group. There are no complication such as fever, sepsis, hematospermia and vasovagal event in two groups.

**Conclusion:** This study shows that TRB is more timesaving than TPB. The complication rectal bleeding and hematuria are more in TRB group than TPB. But in the pain perception are the same between both groups. There are no fever, sepsis, hematospermia and vasovagal event in two groups.

**Keywords:** carcinoma prostate, transrectal ultrasonography, prostate biopsy, transperineal.