

PREVENTION OF THE RISK FACTORS FOR COMPLICATIONS AFTER PROSTATE NEEDLE BIOPSY

Hypothesis / aims of study

- Prostate biopsy for the diagnosis of prostate cancer by transrectal ultrasonography (TRUS) is a common procedure used in daily urology practice with a low complication rate and easy applicability. But, acute prostatitis or sepsis could be serious complications of the procedure. Recent studies showed that patients with urethral catheter, diabetes mellitus or those planned to undergo biopsy from more sites than the standard, should be closely monitored after the biopsy for more frequent complication rate. In this study, the precipitating factors for complications after prostate biopsy by TRUS in one center

Study design, materials and methods

- Between January, 2007 and May, 2011, 484 patients who underwent prostate biopsy by TRUS were assessed retrospectively. Standard preparations, including enema and prophylactic oral antibiotics were given to most patients. The relationship of complications and age, serum total PSA level, prostate volume, number of cores, number of repeated biopsies, presence of urethral catheter and diabetes mellitus, and unprepared prostate biopsy was assessed. Data were analyzed using univariate and multivariate analysis.

Results

- Of the 484 patients, 24 (4.96%) developed complications, including acute prostatitis (18 patients, 3.72%), urinary retention (2 patients, 0.41%), persistent hematuria (1 patients, 0.21%), sepsis (3 patients, 0.62%) within a week after biopsy. 7 patients were hospitalized for high fever. On univariate analysis, unprepared prostate biopsy was the only parameter for complications ($p=0.037$). There was no parameter for sepsis and significant relationship between complications and other parameters.

Interpretation of results

Concluding message

- Unprepared prostate biopsy was the only risk factor for complications. General preparations (enema and prophylactic antibiotics) and aseptic procedure are believed to be more important for preventing complications, although many studies showed various risk factors for complications after prostate biopsy.

Disclosures

Funding: no **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Inje University Sanggye paik Hospital **Helsinki:** Yes **Informed Consent:** Yes