

## ABSTRACT

Benign prostatic hyperplasia (BPH) is one of the most common benign tumors in men with prevalence ranging from 50% for men in their 60s to 90% for men in their 80s. Researcher sought to determine the relationship of prostate specific antigen (PSA) and prostate volume in patients with benign prostatic hyperplasia. This study was based on 33 cases of benign prostatic hyperplasia in the Department of Urology, RSUD Dr. Soetomo Surabaya that diagnosed by histopathology examination. Cases with malignancy, acute urinary retention and prostatitis were excluded. The variables of prostate specific antigen and prostate volume were examined.

The results of this study found that 33 men were enrolled with mean PSA 16,04 ng/ml and mean prostate volume 49,13 ml. Overall, 84,8% had PSA level >4 ng/ml and 90,9% had prostate volume >25 ml. Prostate specific antigen has significant correlation with prostate volume ( $p=0,019$ ;  $r=0,362$ ).

This study concluded that prostate specific antigen and prostate volume showed a significant correlation.

**Keywords: Benign Prostatic Hyperplasia, Prostate Specific Antigen, Prostate Volume**