

ESTIMATION OF SERUM PROSTATE SPECIFIC ANTIGEN (PSA) LEVEL IN BENIGN PROSTATE HYPERPLASIA PATIENTS AND ITS CORRELATION WITH AGE AND PROSTATE VOLUME

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ABSTRACT

This study was aimed to estimate serum prostate specific antigen (PSA) levels in patients suffering from benign prostate hyperplasia, and its association with age and prostate volume of patients in an accurate manner, to be useful for therapeutic, especially medical management of disease. Blood samples were taken from eighty patients i.e. thirty healthy men and forty patients follow up medical treatment for eight months. PSA levels were determined by MiniVidus apparatus, by using two steps sandwich fluorescence technique, and the results showed that there is a significant increase ($P < 0.01$) in serum levels of newly diagnosed patients compared with healthy controls, also significant difference of decrease in mean levels of PSA in the 8 months follow-up treated patients, which reflects the effectiveness of the medical treatment in lowering PSA levels to the normal values. Frequencies of elevated PSA concentration in serum of healthy Iraqi men and BPH patients showed PSA concentration of 4 mg/ml was selected as the cutoff and the gray zone range between 4-10 ng/ml. Significant positive correlations were found between age, prostate specific antigen and prostate volume all BPH patients in the study. Highest positive correlation ($r = 0.54$) was recorded between PSA and PV while a lower correlation ($r = 0.19$) was reported between PSA and age.

KEYWORDS: Prostate Specific Antigen, Benign Prostate Hyperplasia, Prostate Volume, Age