

**Comparison of Serum levels of Prostatic Specific Antigen (PSA) in Melasma-Hirsutism involved women with melasma involved Women**

**Abstract**

**Back ground:** Hirsutism and melasma are common problems in women. Multiple etiologic factors have some role in their existence. Melasmatic patients in some surveys had higher rate of hirsutism than normal rang of society. In recent studies serum levels of PSA have considered in hirstute women

**Objective:** In this study serum levels of PSA were studied in melasm-Hirsutisim involved women with melasma involved women.

**Methods and materials:** In a case-control study 34 melasma hirstute patients and 38 melasma involved patients were studied. According to Ferriman – Gallway score, all of melasma – hirstute women had a hirsutism score of 6 or more. Serum samples were prepare in mid – follicular phase of menstrual cycle.

Serum PSA , 17 Hydroxy progesterone, Androstenedione and free testosteron were measured. Those concentrations were analysed by two different assays, Radioimmunoassay and chemiluminescent enzyme immunoassay. Data processing were done by SPSS method.

**Results:** The mean age of Melasma – Hirstute women and melasma were  $30.3 \pm 7.2$  ;  $31 \pm 6.5$  years, respectively.

Mean  $\pm$  SD of Ferriman – Galway score in Melasma - Hirstute group was  $13.76 \pm 6.1$ . PSA concentration in two Melasma - Hirstute subjects and Melasma with both assays were under 0.01 ng/ml. Familial incidence of melasma and hirsutism in case group was more than control group. ( $p=0.01$ ) infertility in case group was more than control group ( $p=0.05/$ ). 17(OH)progesteron range in case group (in81%) and control group (in 35.5%) were higher than normal range ( $p=0.002$ ).

**Conclusion:** Serum concentration of PSA by radioimmunoassay and chemiluminescent enzyme immunoassay in melasma – hirstute patients is lower than 0.01 ng/ml, and lower concentrations are not detectable by these assays. However, ultrasensitive assay need for more subtle measurement.

**Key words:** melasma, hirsutism, prostatic specific antigen (PSA)