**Title:** Evaluation of the Relationship between Clinicoepidemiological Features of Melasma and the Level of Involvement on Wood's Lamp Examination

**Abstract:** Background: Melasma is classified into four groups based on Wood's lamp examination: epidermal, dermal, mixed and indeterminate. The goal of this study was evaluation of the relationship between clinicoepidemiological characteristics of melasma and the level of involvement under Wood's lamp.

**Methods:** In a cross-sectional study, 50 melasma patients referred to Imam Reza Hospital from March 2010 to September 2011 were studied. The level of melasma involvement in all patients was determined using a Wood's lamp, and the patients' information was collected in a questionnaire and analyzed using SPSS.

**Results:** In single patients, dermal involvement (P=0.000 and P=0.019) and in married patients, epidermal involvement (P=0.001 and P=0.021) was more than the other two levels. Involvement was more frequently dermal in jobs with exposure to sun (P=0.007), and it was epidermal in indoor jobs (P=0.02 and P=0.042). In malar region, there was higher epidermal involvement (P=0.001 and P=0.019). In patients with a history of pregnancy, there was higher epidermal involvement (P=0.000 and P=0.032), and in those without a history of pregnancy, dermal involvement was more frequent (P=0.000 and P=0.004). In patients in whom the melasma appearance was concomitant with pregnancy, epidermal involvement (P=0.000 and P=0.000) was higher, and in patients without a family history the epidermal involvement (P=0.036 and P=0.031) was higher than the other two levels.

**Conclusion:** Based on the findings of this study, it is expected that melasma of epidermal type seems to have a better response to treatment in cases with involvement of Malar region, in married individuals starting with pregnancy, in patients without a family history of melasma, and in those mainly working indoors; and melasma in single persons and in those in environments exposed to light will be more likely of dermal type and will consequently have a worse response to treatment.

**Presentation:** Oral