

Relation of Endokan (ESM-1) Serum Levels with Patient Characteristics and Morphological Features of Uterine Fibroids: A Case-control Study.

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Abstract

Objectives: This study aimed to compare the serum endokan levels of patients with uterine fibroids and the healthy control group. **Design:** A case-control study was designed. **Setting:** A tertiary referential university hospital. **Population or Sample:** The study was conducted with 130 women (uterine fibroid group, n= 65, control group, n= 65) aged between 30 and 45. **Methods:** Serum endokan levels were determined in the study and control groups using by ELISA method. The number of uterine fibroids was identified, and the volume of uterine fibroids was calculated with ellipsoid formula by ultrasonography. **Main Outcome Measures:** The primary outcome parameter is serum endokan levels in patients with uterine fibroids and healthy control groups. Secondly, it is aimed to determine the distribution of serum endokan level of patients according to uterine fibroid number, volume and clinical presentation. **Results:** The mean serum endokan level of patient with uterine fibroid was 145.18 ± 169.86 pg/mL, it was 88.94 ± 54.21 pg/mL in the control group ($p=0.016$). According to Roc analysis, cut-off value of endokan level for uterine fibroid was determined as [?] 133.1 pg/mL. For the cut-off value of 133.1 pg/mL; sensitivity was 36.92%, specificity was 89.23%, positive predictive value was 77.40% and negative predictive value was 58.60%. Above this cut-off value, a 4.8-fold increased significant risk (OR) for uterine fibroid was detected. **Conclusion:** Serum endokan levels were found to be higher in women with uterine fibroids compared to the control group, so endokan may be considered as a significant serum marker.

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