

## **Evaluation of outcomes and complications of Cesarean scar ectopic pregnancy's different treatment methods in Alavi hospital in Ardabil**

### **Abstract**

**Background:** Although the pathogenesis of CSEP has not been fully elucidated, the main theory is that impaired wound healing from previous trauma creates a myometrial cavity that leads to subsequent scarring where the blastocyst implants. The use of medical treatments has been associated with a high initial failure rate (44-91%) and more surgical interventions have been required in most cases. In general, less invasive surgeries have been associated with great progress in recent years and are safer than invasive surgeries.

**Aim:** The purpose of this study was to investigate the consequences and complications of various treatments for ectopic pregnancy and cesarean scar in patients referred to Alavi Hospital in Ardabil.

**Materials and methods:** This study was conducted retrospectively. The data of the patients who were treated with one of the methods of laparotomy, hysteroscopy and curettage, hysteroscopy and curettage after systemic methotrexate, systemic methotrexate or systemic methotrexate + potassium hydroxide in the years 2015 to 2015 in Alavi Medical Education Center were included in the study.

**Results:** 120 patients with ectopic pregnancy and cesarean scar were studied in Alavi Hospital, Ardabil. The average age of the patients in this study was  $30.59 \pm 3.20$  years. The Median number of previous cesarean section was reported to be 2, and the elapsed time since the previous cesarean section was  $17.4 \pm 5.4$  months. In terms of the selected treatment method, there were 50 cases (41.7%) of hysteroscopy and curettage in the studied patients, 36 cases of methotrexate + hysteroscopy and curettage (30%), 28 cases of laparotomy (23.3%), and 5 cases of methotrexate (2/2). 4 percent) and methotrexate + potassium iodide 1 case (0.8 percent), and overall 115 cases (95.8 percent) had complete tumor resolution. Study patients in different treatment groups in terms of complete tumor resolution ( $p < 0.001$ ), duration of hospitalization ( $p < 0.001$ ), blood transfusion during hospitalization ( $p = 0.001$ ), intraoperative bleeding (001 ( $p < 0.001$ )) and the normalization speed of  $\beta$ -HCG ( $p < 0.001$ ) were significantly different, but in the cases of secondary infection ( $p = 0.154$ ) and hysterectomy performed ( $p = 0.167$ ) in the groups, There were no significant differences.

**Conclusion:** The transvaginal method for treating CSEP is associated with high success and fewer complications, while methotrexate-based methods are associated with treatment failure and various complications.

**Keywords:** Ectopic pregnancy, Cesarean scar, Hysteroscopy, Laparotomy