



Laparoscopic and Hysteroscopic Surgery Outcomes in the Treatment of Isthmocele in Women With Abnormal Uterine Bleeding

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ABSTRACT

Introduction: Isthmocele is a uterine scar defect or an opening in the place of a previous cesarean incision that leads to myometrium discontinuity and can be diagnosed by hysteroscopy as its gold standard. The probability of forming isthmocele is 61% after one cesarean and 100% after three cesareans. Its common symptoms are abnormal uterine bleeding, pelvic pain, dysmenorrhea, infertility, and dyspareunia. In addition to medical treatment, surgery via laparoscopy or hysteroscopy is a safe and effective treatment for this complication. This study aimed to investigate and compare the results of laparoscopic and hysteroscopic isthmocele repair surgeries in women referred to Shahid Sadoughi Hospital in Yazd due to abnormal bleeding in menstrual intervals as a result of isthmocele.

Methods and Materials: In this pre- and post-experimental study, we included 20 women referred to Shahid Sadoughi Hospital. They entered the study via the census method. The inclusion criteria were age between 18 and 45, abnormal bleeding in menstrual intervals, and having isthmocele. The exclusion criteria entailed irregular menstruation, having an IUD, having coagulation disorder, and having any pathology in the uterine like myoma. The patients underwent laparoscopic or hysteroscopic repair surgeries, and the data were recorded in a questionnaire. Thirty months later, we investigated and compared the patients in terms of uterine myometrium thickness, the volume of menstrual interval bleeding, dysmenorrhea, dyspareunia, and pelvic pain. Ultimately, our data were analyzed with SPSS version 23, employing t-, Chi-square, and Wilcoxon tests.

Results: Within 30 months, 20 patients (11 in the laparoscopy and 9 in the hysteroscopy group) were studied. In laparoscopic surgery, a significant increase was identified in uterine thickness ($p = 0.001$) and a decrease in menstrual interval bleeding ($p = 0.007$). Also, improvement in pelvic pain ($p = 0.034$), dysmenorrhea ($p = 0.038$), and dyspareunia ($p = 0.031$) were observed to be significant. In hysteroscopic surgery, decreased menstrual intervals bleeding ($p = 0.011$) and relief in pelvic pain ($p = 0.04$) were significantly achieved, but uterine thickness was not considerably different before and after the surgery ($p = 0.096$). Also, relief in dysmenorrhea ($p = 0.999$) and dyspareunia ($p = 0.157$) were not significant.

Conclusion and Discussion: This study shows that repairing isthmocele via hysteroscopy or laparoscopy improves menstrual interval bleeding and pelvic pain. Based on the results of two surgical methods, laparoscopic surgery is a superior choice compared to hysteroscopic surgery.

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