## ES24-0146 Selected Posters

# Effect of Endometrial Polyps, Histology, Intrauterine Localization and the Technique of Polypectomy On Fertility

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## **Background**

Endometrial polyps are frequently found in infertile patients, but most of them are asymptomatic. They can be effectively detected by ultrasound using contrast media or color Doppler, but the gold standard is hysteroscopy. In reproductive age, they carry low risk of malignancy. It is assumed that larger polyps hamper implantation. However, it is not clear yet, whether resection of all polyps necessarily improves the fertility, and is the polyp localization influence the implantation failure.

#### Methods

A retrospective study of ovulatory infertile women with endometrial polyp, at whom TCRP was performed between 2006 and 2012. Time interval between operation and the first pregnancy were registered, if pregnancy occured until 2014. The aim was to evaluate whether the transcervical resection of endometrial polyps (TCRP) improves the fertility status, and polyp histology, intrauterine location, the technique of polypectomy have influence of pregnancy rate (PR) in ovulatory infertile women.

### Results

Fifty patients were eligible for data collection. Anovulation, tubal, male factor were excluded. TCRP was performed by resectoscop or hysteroscopically controlled curettage, hystology was examined. Polyps were categorized to localization: utero-tubal junction, anterior, posterior, lateral, multiple. PR was calculated to TCRP method, histology and location. T-test was used for differences. Twenty-seven pregnancies (54%) were registered after TCRP, 20 (40%) of them in one year. Mean time interval until conception was 12,1 (range 3-41) months. PR was similar in resectoscop and curettage group (21/37, 56% vs. 6/13, 46%). To histology, PR was higher if simple polyp was found than after polyps with hyperplasia (24/37, 65% vs. 3/13, 23%, P=0.008). There were no differences in PR, neither in time interval to conception between the groups of different polyplocalisation.

## **Conclusions**

Removing of endometrial polyps by TCRP improves the fertility of ovulatory women, irrespective to the resection method, i.e. resectoscop or hysteroscopy controlled curettage. Pregnancy rate is higher if endometrial hyperplasia is not found in the polyp. The location of endometrial polyp in the uterine cavity does not influence the fertility. Our data supports the hypothesis, that endometrial polyps physically prevent the implantation and can be the single cause of infertility. Thus, TCRP is recommended, irrespective to polyp localization. Resectoscopy is not superior than histeroscopically controlled curettage. Fertility prognosis is worse if hyperplasia is present, otherwise the one-year PR is good. Although the minimum follow up was 2 years, longer postoperative follow and larger patients number may alter the pregnacy rates. Influence of polyp size was not examined. Fertility related life-style and environmental factors were not examined.