Study on the Relationship between Clinical Condition and Endometrial Polyps in Infertility Patients

Lingling Tong, Xiaojun Liu*

China-Japan Union hospital of Jilin University, Changchun, Jilin, 130033, China
* Corresponding Author

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Abstract: Endometrial polyp is one of the most common endometrial lesions in women. The main manifestations of endometrial polyp are menorrhea, intermenstrual bleeding or infertility, and irregular bleeding after menopause. Eighty female patients who were admitted to gynecology department of our hospital for infertility were selected as the research objects, and all of them underwent laparoscopic examination of pelvic diseases. To analyze the relationship between the prevalence of endometrial polyps and the years of infertility, and the correlation between the disease and the age of patients, the study showed that there was no significant difference in the incidence of endometrial polyps between the different groups ($P > 0.05$), infertility years, maternal history, and endometriosis are associated with endometrial polyps. With the increase of infertility, the incidence of endometrial polyps increased. The age, BMI, type of infertility and polyp number were the influencing factors of the natural pregnancy rate after TCRE, and the use of dydrogesterone cycle treatment after TCRE can significantly improve the postoperative natural pregnancy rate.

1. Introduction

Endometrial polyp is a common disease in infertile women of childbearing age. Current studies have found that it is closely related to infertility. The mechanism of infertility caused by endometrial polyps may be irregular uterine bleeding and inflammatory reaction of endometrium caused by endometrial polyps, which produces a similar effect to IUD. And then obstruct sperm transport, the occurrence of local hormone disorders [1]. Hysteroscopy with direct vision of the uterine cavity can accurately observe the lesion site, and the probability of endometrial destruction during the operation is greatly reduced. Effective protection of the intima, so hysteroscopy and curettage are effective, but the effect of electrotomy in the reduction of menstruation in patients after surgery is better, safe and reliable [2]. All patients enrolled had signed informed consent for surgery and scientific research. Exclusion criteria: 1 combined with other uterine lesions, such as intrauterine adhesions, submucosal uterine fibroids, uterine mediastinum and other uterine malformations. 2 combined with uterine fibroids, endometriosis, ovarian tumors. 3 female sex hormone abnormalities. Studies have shown that the abnormal expression and abnormal interaction of these hormones and factors may be involved in the development of endometrial proliferative diseases and even endometrial cancer. Its role in the development of EP is worth exploring [3].

In 2013, the value of three-dimensional and energy Doppler ultrasound in the diagnosis of endometrial polyps was proposed by relevant scholars [4]. Since then, the predictors of endometrial polyp malignancies have been studied by relevant scholars [5]. Since 2015, a prospective study on the treatment of endometrial polyps by electromyography has been proposed by relevant scholars [6]. Endometrial polyp is a kind of gynecological disease that endometrial lesions gradually form inflammatory polyps and can lead to infertility, which has a great impact on many families. Looking at the medical level in recent years, it is not difficult to find some advances in medical technology. The application of hysteroscopy makes it easier and easier to detect endometrial polyps. [7]. The recurrence rate was greatly reduced and the pregnancy rate was significantly increased. Patients after TCRE were treated according to age, infertility years, body mass index (BMI), type of infertility, number of previous uterine operations, and location of polyps. Number of polyps and use

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of progesterone after stratification. There were significant differences in the natural pregnancy rate ($P < 0.03$). At the time of hysteroscopy, the polyp was successfully removed under the microscope. The operation was successful, no complications occurred during the operation, and intermittent abdominal pain occurred only after the follow-up [8]. There was no difference in the basic conditions between the intra-abdominal polyp subgroup and the normal uterine subgroup. If the mass persists or increases, or if it is suspected to be a malignant tumor, laparotomy should be performed during pregnancy. Because the patient is a twin, there is a strong fertility requirement, and it is difficult to handle during pregnancy [9]. Due to concerns about chemotherapy side effects and fetal safety, the patient did not receive chemotherapy after appendicectomy, and the tumor had metastasized to the pelvic cavity until the end of pregnancy. Therefore, whether chemotherapy should be given during pregnancy to improve the prognosis of patients is a question worth considering. This article studies the relationship between clinical conditions and endometrial polyps in patients with infertility [10].

2. Materials and Methods

Surgical treatment was scheduled for all patients within 4 to 7 days after menstruation. Misoprostone was used to soften the cervix 3 hours before operation. In addition, there were significant differences in pelvic inflammation and pelvic surgery (mainly conservative surgery of uterus and ovary) between POF and DOR groups and the normal group ($P < 0.05$). The clinical manifestations of irregular menstrual cycles and menstrual flow were significantly increased compared with normal people. At this stage, endometrial polyps use vaginal ultrasonography, which has a high detection rate, which has been widely used in the screening of preliminary diagnosis. With the continuous application of hysteroscopy and three-dimensional ultrasound technology, it promotes intrauterine The detection rate of membrane polyps has been effectively improved.

In recent years, with the widespread use of ultrasound and hysteroscopy, the diagnosis and treatment of endometrial polyps has been greatly improved. At present, the incidence of infertility is high, and the causes of infertility are various. It is often difficult for clinical examination to make accurate and comprehensive diagnosis quickly, thus delaying treatment. Epidural block anesthesia was applied to the patients. The patients were operated in the position of bladder lithotomy. In order to maintain the pressure of uterine dilatation in 85-110 mmHg and the flow rate in 140 ml/min, 6% glucose solution should be selected for uterine dilatation. Treatment was performed with curettage, and a suiTable type of curette was used for sputum scraping under hysteroscopy. The polyps scraped out of the cockroach are removed from the body while the uterine cavity is subjected to vacuum suction, and finally the sputum is scraped again to confirm whether the sputum is completely scraped. It has become the gold standard for the treatment of endometrial polyps. Previous studies have shown that TCRE can improve the endometrial environment, reduce the endometrial inflammatory response, and improve the postoperative natural and assisted reproductive pregnancy rate.

To analyze the reasons, compared with curettage, the treatment of electric resection for endometrial polyps clearance is more thorough, thus reducing the recurrence rate. In the course of treatment, the degree of ovarian damage caused by electrotomy is lower than that of curettage, and the pregnancy rate is significantly increased. Therefore, electrotomy should be widely used in the consideration of the recurrence rate and pregnancy rate after operation. A retrospective case-control study was conducted to analyze and compare the clinical pregnancy rates between the failure of assisted pregnancy and the failure of assisted pregnancy. The clinical pregnancy rate refers to the ratio of the sum of successful natural pregnancy and successful pregnancy after pregnancy to the total number of cases. In order to avoid missing polyps, a wider range of electrical cuts is used, which worsens the damage of the intima and leads to a decrease in the postoperative natural pregnancy rate. At the same time, previous studies have confirmed that polyps are closely related to inflammatory reactions, and the local immune microenvironment in the uterine cavity of patients with multiple endometrial polyps may be destroyed. The implantation process of fertilized egg can be regarded as allogeneic transplantation, and the endometrial receptivity in this process is closely

related to the success of pregnancy. The relationship between endometrial polyps and infertility time is shown in Table 1.

Table 1 The relationship between endometrial polyps and infertility time

	Endometrial polyps	No endometrial polyp
Less than 3 years group	6.53±0.62	35.71±6.30
4~6 group	10.82±1.06	20.51±3.50

3. Result Analysis and Discussion

Endometrial polyp is a common disease in infertile women of childbearing age. Many studies have found that it is related to infertility. Endometrial polyps can cause embryo implantation disorders leading to infertility, endometritis and other diseases causing infertility may also lead to the occurrence of endometrial polyps. By excising polyps and eliminating the inflammatory reaction of the endometrium, the endometrium can be fully transformed through the role of progesterone, improve the environment in the uterine cavity, increase the normal thickness of the endometrium, and reduce infertility caused by intrauterine inflammatory stimulation. Postoperative follow-up showed that TCRE can significantly improve the natural pregnancy rate of patients, and the natural pregnancy rate gradually increased with time. The peak was reached at 6 to 9 months after surgery, and the consistency of B-ultrasound and hysteroscopy on endometrial polyps was analyzed and compared. Endometrial polyps were confirmed by pathological examination.

To study the relationship between the time of infertility, the history of pregnancy and childbirth, the examination of pelvic diseases by laparoscopy and endometrial polyps, according to the rule of the patients from young to old and from infertility to infertility. In secretory phase, the expression of INS in EP gland was significantly lower than that in normal endometrium group ($P < 0.03$). There was no significant difference between the expression of INS in peripolyp endometrium and normal endometrium gland ($P > 0.03$). There was no significant difference in the expression of INS between EP and the endometrium around polyps ($P > 0.03$). Endometrial proteins in secretory phase are shown in Figure 1. The essence of endometrial polyps is mainly related to age-related endocrine changes. However, this study showed that endometrial polyps did not change significantly with age. The presumed reason may be: the infertile women of childbearing age in this study have a regular menstrual cycle, although there are differences in age, but there are progesterone antagonists and periodic intimal shedding. Therefore, the difference in the incidence of endometrial polyps is not obvious. Progesterone drugs, as a sex hormone regulator, can effectively inhibit the levels of follicle stimulating hormone and luteinizing hormone in the blood, thereby inhibiting the rise of estrogen levels and acting as an anti-estrogen. Inhibition of endometrial proliferation, atrophy of the intimal gland.

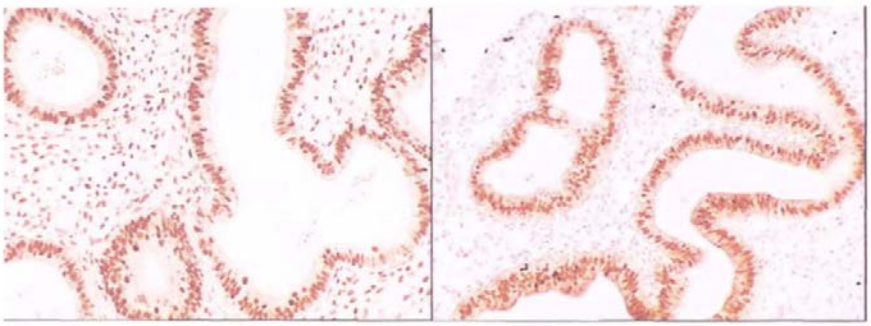

Fig.1. Endometrial proteins in secretory phase

We conducted this study to determine whether infertility complicated with endometrial polyps needs to be addressed. The results showed that the clinical pregnancy rate of infertile patients with failure of assisted pregnancy and endometrial polyps after polypectomy was higher than that of infertile patients with failure of assisted pregnancy and normal uterine cavity. It has adverse effects

on reproduction through the following aspects: 1. irregular uterine bleeding; 2. inflammation of endometrium; 3. acting as a foreign body, it produces a similar effect to IUD. 4. Obstacles to sperm transport. 5. Influencing the implantation of fertilized eggs; 6. Increasing endometrial surface area and secreting some hormones can inhibit sperm adhesion to zona pellucida. A number of studies have shown that the pregnancy rate of infertile women increases after endometrial polypectomy. It also supports the idea that EP is the cause of infertility. However, the amount of menstruation, pregnancy rate, recurrence rate, etc. after surgery is stronger than curettage. The differences were statistically significant ($P < 0.03$), and were analyzed by laparoscopic findings of endometriosis, pelvic and/or fallopian tube adhesions, and concurrent hydrosalpinx and endometrial polyps. The relationship between pelvic disease and endometrial polyps is shown in Figure 2. Therefore, the effect of hysteroscopic electrotomy and endometrial polyp infertility is more satisfactory, and it is worthy of widespread application in clinical treatment.

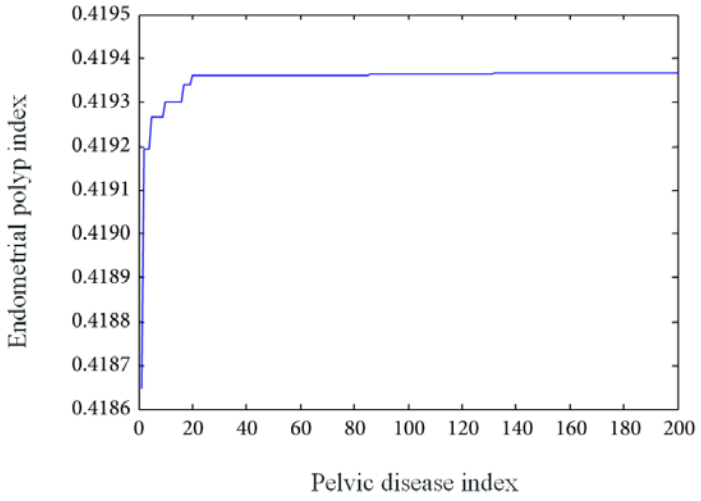

Fig.2. The relationship between pelvic diseases and endometrial polyps

4. Conclusion

In this paper, the relationship between the clinical situation of infertility patients and endometrial polyps was studied. The relationship between infertility years and the prevalence of endometrial polyps was analyzed, and the influence of age on the prevalence of endometrial polyps was discussed. The results showed that the duration of infertility was positively correlated with the prevalence of endometrial polyps. The longer the duration of infertility, the higher the probability of endometrial polyps. It is suggested that the endometrium around polyps is different from normal endometrium in hormone expression and sensitivity to hormone. The changes of endometrial local endocrine environment may provide favorable conditions for the pathogenesis of EP. Polyps may be an intrauterine factor affecting infertility in young women. Young infertile patients who have not tried to help pregnancy have higher endometrial polyps. Hysteroscopy should be performed to exclude endometrial polyps. Early diagnosis and treatment of endometrial polyps may result in clinical pregnancy. The results showed that endometrial polyps were associated with infertility, infertility, and infertility in women with infertility. B-ultrasound combined with hysteroscopy is an effective means to exclude endometrial polyps. In the clinical treatment, attention should be paid to the influencing factors of endometrial polyps, which are discovered and treated in time.

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