World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-42, January 2025
ISSN: 2749-3644

THE IMPORTANCE OF HYSTEROSCOPY IN THE DIAGNOSIS AND TREATMENT OF FEMALE INFERTILITY

Department of Obstetrics and Gynecology, Urgench Branch of Tashkent Medical Academy
Zhumaniyazov K.A., Zhumaniyazova H.A., Reyimberganov Zh.

Article history:

Received: October 10th 2024
Accepted: November 8th 2024

Abstract:

Intrauterine pathologies occupy one of the leading places in the structure of gynecological diseases, including the structure of female infertility. The widespread introduction of endovisual research methods, including hysteroscopy in gynecological practice has significantly expanded the possibilities of diagnosing and treating intrauterine pathologies. The high efficiency of this method is characterized by the possibility of simultaneous correction of the identified intrauterine pathology and restoration of reproductive function in women with uterine infertility. The article presents an analysis of the structure of intrauterine pathologies in women with infertility.

Keywords: Infertility, Intrauterine Pathology, Hysteroscopy

Infertility is one of the main problems that determines the demographic situation in modern society. According to the latest data from the World Health Organization, 17.5% of the adult population suffers from infertility, that is, approximately every sixth person in the world. [1]. Intrauterine pathology occupies a leading place in the structure of gynecological morbidity, causes pathological bleeding, infertility, pain syndrome [2, 3, 4]. According to the literature, the proportion of the uterine form of female infertility varies from 24 to 62%, including in patients participating in assisted reproductive technology (ART) programs. As the only cause of infertility, intrauterine pathology is detected in approximately 10-15% of women, and in combination with other factors, its frequency increases to 50% [2, 3]. Modern methods of diagnosing intrauterine pathology allow us to determine adequate tactics for managing patients, to develop an optimal set of therapeutic measures to restore reproductive function. Currently, minimally invasive technologies are increasingly replacing traditional diagnostic and surgical methods. The widespread introduction of hysteroscopy into gynecological practice has significantly expanded the possibilities of diagnosing and treating pathological conditions of the endometrium. The high efficiency of this method is characterized by the possibility of simultaneous removal of the detected pathological formation [3, 5, 6].

OBJECTIVE OF THE WORK: To study the prevalence of intrauterine pathologies and analyze their structure in women with infertility.

MATERIALS AND METHODS OF THE STUDY: we conducted a retrospective analysis of the medical records of 840 women hospitalized for planned surgical treatment for infertility for the period from January 2023 to January 2025. Of these, 94 women with uterine infertility underwent hysteroscopy, and the remaining 746 women with other causes of infertility underwent laparoscopic surgery. An examination card was filled out for each patient, which made it possible to take into account the anamnesis data, objective examination, additional research methods, and surgical protocols. All patients underwent a comprehensive examination, which included a clinical and laboratory examination, ultrasound examination of the uterus and appendages, hysteroscopy, and histological examination of the removed material. All patients underwent transvaginal ultrasound examination before and after treatment. Hysteroscopy was performed using a set of KARL STORZ® endoscopic equipment and instruments. The operation was performed under spinal anesthesia with mandatory monitoring of saturation and hemodynamics. Indications for hysteroscopy were the following intrauterine pathologies: endometrial polyps, submucous fibroids, intrauterine adhesions, endometrial hyperplasia and intrauterine septa.

STUDY RESULTS: As a result of the clinical and laboratory examinations, intrauterine pathology was detected in 94 (11.1%) patients out of 840 patients with various infertility factors. Patients with tubal-peritoneal infertility (TPI) accounted for - 112 (13.3%), with ovarian infertility, including PCOS - 158 (18.8%), with mixed infertility - 292 (34.7%), with EGE - 142 (16.9%) and with uterine fibroids - 42 (5%). The study included patients observed at the clinical base of the Urgench branch of the Tashkent Medical Academy (Table 1).

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-42, January 2025
ISSN: 2749-3644

Table 1

Causes of infertility	**N**	**%**
Intrauterine pathology	94	11,1
Tubal-peritoneal infertility	112	13,3
Ovarian form	158	18,8
Mixed form	292	34,7
EGE	142	16,9
Uterine fibroids	42	5
Total	840	100

To study the structure of the uterine form of infertility, 83 patients were divided into 6 groups depending on the nature of the intrauterine pathologies that caused infertility: Group I - 51 women with endometrial polyps, Group II - 10 women with intrauterine adhesions, Group III - 8 women with submucous myoma, Group IV - 8 women with a uterine septum, Group V - 13 women who underwent diagnostic curettage (of which 5 women planned IVF), Group VI - 4 women with endometrial hyperplasia. Primary infertility was observed in 40 (42.5%) of 94 patients, and secondary infertility was observed in 54 (57.5%) patients. Hysteroscopy was performed in combination with laparoscopy to treat other infertility factors in 42 (44.6%) of 94 women (**Table 2**).

Table No. 2

Indications for hysteroscopy	**N**	**%**
Endometrial polyps	51	54,2
Intrauterine adhesions	10	10,6
Submucous myoma	8	8,5
Septa of the uterine cavity	8	8,5
Diagnostic hysteroscopy	13	13,8
Endometrial hyperplasia	4	4,2
Total	94	100

CONCLUSION: the analysis of the infertility structure of 840 examined infertile patients shows that the frequency of intrauterine pathologies in the structure of infertility of women addressed to the private clinic "SARVINOZ MEDSERVIS" of the Khorezm region is 11.5%, and in combination with other factors, its frequency is 44.6% and the most common intrauterine pathology is endometrial polyp - 54.2%.

LITERATURE

1. World Health Organization Infertility Report. 04. 2023
2. Dzhamaludinova A. F., Gonyan M. M. Reproductive health of the population of Russia // Young scientist. - 2017. - No. 14.2. - P. 10-13.
3. Erkinbaeva D. E., Zhumaniyazov K. A., Duschanova Z. A. (Nov-Dec 2023). Intrauterine pathologies in the structure of female infertility and the importance of hysteroscopy in diagnosis and treatment. Central Asian journal of medical and natural sciences. 04 issue:06.684-689.
4. Vannuccini S, Clitchley VL, Jabbour HN. Infertility and reproductive disorders: Impact of hormonal and inflammatory mechanisms on pregnancy outcomes. Hum Reprod Update. 2016;22(1):104-15.
5. Waleed, E. K. Comparing the effect of office hysteroscopy with endometrial scratch versus office hysteroscopy on intrauterine insemination outcome: a randomized controlled trial / E.K. Waleed, M. Elsadek, W. Saber // European Journal of Obstetrics & Gynecology and Reproductive Biology – 2015. – Vol.194. – P. 96-100.
6. Wortman, M. Ultrasound-Guided Reoperative Hysteroscopy for Managing Global Endometrial Ablation Failures / M. Wortman, A. Daggett, A. Deckman // Journal of Minimally Invasive Gynecology – 2014. – Vol. 21. - No. 2. – P.238-244.