

THERAPEUTIC EFFICACY
OF DILATATION AND CURETTAGE
IN ENDOMETRIAL POLYPS:
IS IT A VALUABLE METHOD?

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Rezumat

Eficacitatea terapeutică a dilatării și chiuretajului în polipii endometriali

Studiul a fost efectuat în perioada iunie 2008 – martie 2011, la Spitalul de Educație și Cercetare Atatürk din Izmir, Turcia. 36 de femei cu sângerare uterină anormală, care au suferit o dilatare și chiuretaj și la care evaluarea histopatologică a diagnosticat polip endometrial, au fost incluse în studiu. Toate pacientele au suportat histeroscopie imediat după menstruație. Au fost evaluate rezultatele și ratele.

Nouă (25%) dintre paciente au fost vindecate prin dilatare și chiuretaj și 27 (75%) au fost tratate cu succes prin histeroscopie. Diagnosticul a fost dovedit, polipii fiind eliminați prin histeroscopie de birou.

În caz de hemoragii uterine anormale, cum ar fi polipul endometrial, histeroscopia de birou este o metodă mult mai utilă decât dilatarea și chiuretajul, pentru că este o metodă simplă prin care pacientul poate fi tratat la momentul diagnosticării.

Cuvinte-cheie: dilatare și chiuretaj, polip endometrial, histeroscopie de birou.

Резюме

Терапевтическая эффективность расширения и кюретажа в эндометрических полипах: действительно ли это ценный метод?

Исследование проводилось с июня 2008 до марта 2011 года в Измир Ататюрк учебной и научной больнице, отделение гинекологии и акушерской помощи, Измир, Турция. Тридцать шесть женщин с аномальными маточными кровотечениями, которые прошли диагностическое выскабливание и у которых был поставлен диагноз полип эндометрия, были включены в исследование. Всем пациенткам проводилась амбулаторно-офисная гистероскопия сразу же после их очередной менструации. Результаты диагностического выскабливания и гистероскопии были оценены.

Девять (25%) пациенток могут быть полностью вылечены при помощи диагностического выскабливания и 27 (75%) пациенток были успешно пролечены офисной гистероскопией. Диагноз был гистологически доказан, а полипы были удалены посредством офисной гистероскопии. В случаях патологии матки, которые вызывают аномальные кровотечения, как полип эндометрия, офисная гистероскопия является более полезной, чем метод диагностического выскабливания, потому, что это простой метод, который позволяет лечить пациента на момент постановки диагноза.

Ключевые слова: дилатация и кюретаж, полип эндометрия, офисная гистероскопия.

Introduction

Dilatation and curettage (D&C) is a surgical procedure in which the cervix is dilated and a curette inserted in to the uterus to sample or remove tissue from the endometrial cavity. D&C is used to diagnose uterine disorders or treat in conditions such as abnormal uterin bleeding [1] or after miscarriage. Complications include introduction or spreading of infection, uterine perforation and adhesions.

Including dilatation and curettage, the false negativity rates of all endometrial biopsies were detected between 2-6% and in only smaller than 60% of the patients the endometrial cavity can be sampled [2]. It is concluded that D&C can be regarded as the 'golden standart' for abnormal uterine bleedings [3].

Endometrial polyps are common hyperplastic pathologic findings in gynecologic pathology practice. The majority of these lesions are benign and the malignant changes in these lesions are uncommon. Although most of them are asymptomatic and identified during routine pelvic examination or infertility evaluation, they are one of the main organic lesions that causes abnormal uterine bleeding.

Hysteroscopy is an endoscopic procedure usually used in anormal uterine bleeding and for removing adhesions, diagnose the cause of repeated miscarriage, locating an intra-uterin device and also for some sterilization techniques. It allows finding out the source of the pathology and perform a biopsy of the suspected area. It is a safe procedure but complications like perforation, infection or electrolyte imbalance may occur. The importance of hysteroscopy is being aggravated in both diagnoses and treatment of intrauterine lesions by the development of noninvasive and invasive diagnostic procedures in modern gynecology [4, 5, 6]. Abnormal uterine bleeding is the leading indication for hysteroscopy [2, 7]. Office hysteroscopy which can give the possibility of both visualisation and treatment of intrauterine lesions seems to be the best

diagnostic and therapeutic choice for illuminating the etiology of abnormal uterine bleeding [2, 8]. The diagnostic efficacy of office hysteroscopy is better than D&C and it is becoming to take the place of D&C in patients with abnormal uterine bleeding [8-15]. In the study, we aimed to evaluate the therapeutic efficacy of D&C in endometrial polyps.

Material and Methods

This retrospective study was performed at Izmir Atatürk Training and Research Hospital 3rd Obstetrics and Gynecology Department from June 2008 through March 2011. One hundred twenty nine patients who applied for abnormal uterine bleeding and underwent D&C were evaluated. Thirty six (27.9%) of those 129 patients who were diagnosed as endometrial polyp were included in the study. Office hysteroscopy were carried out just after the end of menstrual bleeding period. Informed consent forms were taken from all patients before D&C and hysteroscopy procedures. All the procedures were applied by the same doctors. According to data gained by D&C and office hysteroscopy, therapeutic rates were obtained. Microsoft Office Excel 2007 program was used to evaluate data.

Hysteroscopic procedures were applied by local anesthesia or without anesthesia according to the office availability by office hysteroscope (diameter 2 mm, length 26 cm, Forward Oblique Telescope 30o, Bettocchi Continuous-Flow Operating Sheath 4.2 mm, semirigid, 5 Fr., length 34 cm instruments, Storz, Germany). Uterine cavity distension was done by %0,09 NaCl or by %5 mannitol solution when electrocautery was used. Neither vaginal speculum nor tenaculum was used during procedures. By the direct visualisation under the guideness of hysteroscope; the introitus was passed through vagina. Finally uterine portion was found and uterine cavity was reached through endocervical canal. Endocervical canal, uterine fundus, tubal ostiums, anterior and posterior uterine walls were examined in detail. Hysteroscopy was evaluated as efficient when bilateral ostiums, endometrial cavity and endocervical canal were all examined. Hysteroscopic view was determined as normal in cases of when adequate uterine cavity and endometrium in early proliferative phase and no structural abnormality. In addition, endometrial biopsies were taken under the view of hysteroscopy.

Results

One hundred twenty nine patients who applied for abnormal uterine bleeding underwent D&C were evaluated. Of the 36 (27.9%) 129 patients, who were diagnosed as endometrial polyp were included in the study. One hundred eight (83.72%) of 129 patients

were in the period of premenopause while 21 (16.28%) were in the postmenopausal period.

The mean age of the patients was 45.09 ± 3.06 (range from 27 to 63). 6 patients were (4.65%) were between the ages of 25-29, 3 (2.32%) were between the ages of 30-34, 18 (13.95%) were between the ages of 35-39, 36 (27.90%) were between the ages of 40-44, 39 (30.23%) were between the ages of 45-49, 9 (6.97%) were between the ages of 50-54 and 18 (13.94%) were between the ages of 55-63.

The mean duration of bleeding was 22.88 months (minimum 2 months, maximum 10 years) for premenopausal patients and 7.7 months (minimum 1 month, maximum 2 years) for postmenopausal patients. Bleeding characteristics of the patients were menorrhagia in 84 (65.1%) patients, methroragia in 24 (18.6%) patients and postmenopausal bleeding in 21 (16.3%) patients. In 9 (25%) of 36 patients who were diagnosed as endometrial polyps by D&C, endometrial polyps were not detected by office hysteroscopy and the removal of polyps by D&C was failed in 27 (75%) patients. In these 27 patients, polyps were detected and treated by office hysteroscopy. Polyps which were removed by office hysteroscopy were also confirmed histopathologically. The distribution of patients with polyp is shown in *table*.

Distribution of patients with polyp

Method	Polyp	Normal	Total
D&C	36	-	36
Hysteroscopy	27	9	36

Discussion

The importance of hysteroscopy is being adopted in both diagnosis and treatment of intrauterine lesions and abnormal uterine bleeding by technological development in modern gynecology [4, 5].

In this study, we proposed to test the therapeutic efficacy of D&C. The rate (25%) was not regarded enough to be a therapeutic method. In 2001, Gebauer et al. claimed that D&C alone was inadequate in determination and treatment of polyps. D&C could detect only 43% of polyps which were previously detected by hysteroscopy [16]. The diagnostic efficacy of D&C was argued. Leather emphasized that D&C could have got samples in less than 60% of the uterine cavity in patients with abnormal uterine bleeding while in 16% of the patients only one fourth of the cavity could have been sampled [9]. It was also reported that the rate of endometrial polyp detection was 10-25% by the D&C alone [17, 18].

Risk of uterine perforation is 0.6-1.3% and risk of bleeding is 0.4% in office hysteroscopy procedures [17, 18]. Any other complications were not seen during the procedures. In 2002, Ceci et al. reported that the sensitivity was 98%, the specificity was 95%, the positive predictive value was 96% and the negative

predictive value was 98%. They also reported that office hysteroscopy had a better diagnostic efficacy than D&C [8]. Garuti et al. reported that the sensitivity of hysteroscopy was 94%, the specificity was 88.8%, the negative predictive value was 96.3% and the positive predictive value was 83.1% in detection of endometrial polyps [19].

In 2001, Epstein et al. emphasized that hysteroscopy was superior to D&C in cases with adequate endometrial samples in postmenopausal patients with bleeding and suspicious lesions in endometrial cavity with endometrial thickness 5 mm or higher [20].

Gimpelson and Rappold compared the biopsy results of D&C and hysteroscopy in 276 abnormal uterine bleeding patients and reported that the results were similar in 223 patients (80.8%). In 44 (16%) patients, hysteroscopy had better results than D&C and in only 9 (3.3%) patients D&C was superior to hysteroscopy [10].

As a research procedure hysteroscopy was superior to D&C in intrauterine abnormality detection by direct visualisation of uterine cavity [10-14]. In many studies, it was concluded that the hysteroscopy was an excellent procedure for detecting intrauterine pathology and treatment at the same time [14, 18, 21, 22].

Conclusion

D&C has a controversial and restricted role in abnormal uterine bleeding evaluation due to its low diagnostic and therapeutic efficacy. Office hysteroscopy can be regarded as one of the alternatives in evaluation of abnormal uterine bleeding. It has the advantages such as availability in office with scarce or without anesthesia, low cost, superiority to D&C in diagnosis and tolerability.

References

1. Aksüt H., Ateş A.G., Uyumaz D., Atgüden Z., Uysal S., Soyly F. *Acute abdomen in the first trimester of pregnancy; the corpus luteum torsion: a case report*. In: Smyrna Tıp Dergisi, 2012; nr. 2(1), p. 49-51.
2. Wieser F., Tempfer C., Kurtz C., Nagele F. *Hysteroscopy in 2001: a comprehensive review*. In: Acta Obstet. Gynecol. Scand., 2001; nr. 80, p. 773-783.
3. Stock R.J., Kanbour A. *Prehysterectomy curettage*. In: Obstet. Gynecol., 1975; nr. 45, p. 537-541.
4. Jennigs J.C. *Abnormal uterine bleeding*. In: Med. Clin. North Am., 1995; nr. 79(6), p. 1357-1376.
5. Itzkowic D. *Hysteroscopy. Its place in modern gynaecology*. In: Aust. Fam. Physician, 1992; nr. 21(4), p. 425-429.
6. Minareci P.Ç., Batioğlu A.S. *Hysteroscopy*. In: Türkiye Klinikleri J. Surg. Med. Sci., 2007; nr. 3(40), p. 83-90.
7. Kaya C., Pabuçcu R. *Applications of Office Mini-Hysteroscopy: Rationales and Advantages*. In: Türkiye Klinikleri J. Gynecol. Obst., 2008; nr. 18, p. 41-51.

8. Ceci O., Bettocchi S., Pellegrino A., Impedovo L., Di Venere R., Pansini N. *Comparison of hysteroscopic and hysterectomy findings for assessing the diagnostic accuracy of Office hysteroscopy*. In: Fertility and Sterility, 2002; nr. 78, p. 628-631.
9. Leather A.T., Savvas M., Studd W.W. *Endometrial histology and bleeding patterns after 8 years of continuous combined estrogen and progesterone therapy in postmenopausal women*. In: Obstet. Gynecol., 1991; nr. 78, p. 1008-1010.
10. Gimpelson R.J., Rappold H.O. *A comparative study between panoramic hysteroscopy with directed biopsies and dilatation and curettage. A review of 276 cases*. In: Am. J. Obstet. Gynecol., 1988; nr. 158, p. 489-492.
11. Brooks P.G., Serden S. *Hysteroscopic findings after unsuccessful dilatation and curettage for abnormal uterine bleeding*. In: Am. J. Obstet. Gynecol., 1998; nr. 54, p. 1357.
12. Loffer F.D. *Hysteroscopy with selective endometrial sampling compared with D&C for abnormal uterine bleeding: The value of a negative hysteroscopic view*. In: Obstetrics & Gynecology, 1989; nr. 73, p. 16-20.
13. Goldrath M.H., Sherman A.I. *Office hysteroscopy and suction curettage: Can we eliminate the hospital diagnostic dilatation and curettage?* In: Am. J. Obstet. Gynecol., 1985; nr. 152, p. 220.
14. Valle R.F. *Hysteroscopic evaluation of patients with abnormal bleeding*. In: Surgery, Gynecology & Obstetrics, 1981; nr. 153, p. 521-526.
15. Yıldız A., Köksal A., Ateş P.F., İvit H., Keklik A., Çukurova K. *Is Hysteroscopy more Valuable than Dilatation and Curettage in Evaluation of Intrauterine Cavity?* In: Turkish Clinics J. Med. Sci., 2009; nr. 29(3), p. 675-680.
16. Gebauer G., Hafner A., Siebzehrubel E., Lang N. *Role of hysteroscopy in detection and extraction of endometrial polyps: results of a prospective study*. In: Am. J. Obstet. Gynecol., 2001; nr. 184, p. 59-63.
17. Grimes D. *Diagnostic dilatation and curettage: A reappraisal*. In: Am. J. Obst. Gyn., 1982; nr. 142, p. 1-6.
18. Guidlaine L., Allaire C., Fortier M. *Guidelines for the management of abnormal uterine bleeding*. No 106, August 2001.
19. Garuti G., Sambruni I., Colonnelli M., Luerti M. *Accuracy of hysteroscopy in predicting histopathology of endometrium in 1500 women*. In: J. Am. Assoc. Gynecol. Laparosc., 2001; nr. 8, p. 207-213.
20. Epstein E., Ramirez A., Skoog L., Valentin L. *Dilatation and curettage fails to detect most focal lesions in the uterine cavity in women with postmenopausal bleeding*. In: ACTA Obstetrica et Gynecologica Scandinavica, 2001; nr. 80(12), p. 1131-1136.
21. Towbin N.A., Gviazda M., March C.M. *Office hysteroscopy versus transvaginal ultrasonography in the evaluation of patients with excessive uterine bleeding*. In: Am. J. Obstet. Gynecol., 1996; nr. 174(6), p. 1678-1682.
22. Widrich T., Bradley L.D., Mitchinson A.R., Collins R.L. *Comparison of saline infusion sonography with office hysteroscopy for the evaluation of the endometrium*. In: American Journal of Obstetrics & Gynecology, 1996; nr. 174, p. 1327-1334.

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