



Available online at: <http://www.iajps.com>

Research Article

INVESTIGATING THE PREVALENCE OF ABNORMAL PATHOLOGIES IN EVACUATIVE CURETTAGE PRODUCTS IN AMIR-ALMOMENIN HOSPITAL IN ZABOL, 2013 TO 2016

Khadijeh Rezaie Keikhaie¹ and Zohreh Mahmoodi^{2*}

¹Department Obstetrics and Gynecology, Maternal and Fetal Health Research Center, Zabol University of Medical Sciences, Zabol, Iran.

²Department of Cardiology, Faculty of Medicine, Zabol University of Medical Sciences, Zabol, Iran.

Abstract:

Diagnostic curettage, endometrial biopsy, and hysteroscopy are some diagnostic methods for patients who are hospitalized with abnormal uterine bleeding. In fact, curettage is implemented to diagnose uterine complications, treat forgotten abortions, and determine the cause of infertility. The main objective of the present study is investigating the prevalence of abnormal pathologies in evacuative curettage products in Amiralmomenin Hospital in Zabol from 2013 to 2016. The present descriptive study included 339 patients, aged more than 35 years old, who underwent diagnostic curettage because of abnormal bleeding in Amiralmomenin Hospital in Zabol from 2013 to 2016. Required data was collected using a researcher-made questionnaire and analyzed using SPSS, Version 18. Mean age of patients with cancer turned out to be 45.75 ± 1.98 , 54.4 ± 1.33 for atrophy patients, 44.31 ± 0.45 for miscellaneous diagnosis, and 43.45 ± 0.95 for healthy subjects. According to the analysis of the results of sample curettage pathologies, 134 cases (39.5%) had Hyperplasia, 7 cases (2.06%) had cancer, 40 cases (11.79%) had atrophy, 107 cases (31.5%) had normal uterus, and 51 cases (15.04%) had miscellaneous complications; in case of abnormal bleeding complaints, 159 cases (46.9%) had Menorrhagia, 57 cases (16.8%) had metrorrhagia, 43 cases (13.2%) had menometrorrhagia, and 80 cases (23.1%) had postmenopausal bleeding. According to the results of the present study, abnormal uterine bleeding is the most important clinical sign of endometrial cancer; therefore, it is quite essential for women above 35 years old with uterine bleeding to undergo clinical examination. It is, also, recommended to conduct further studies on the causes of hyperplasia, endometrial cancer prevention, and the impact of hyperplasia treatment.

Key Words: Abnormal Pathologies, Curettage Products, Zabol, Iran.

Corresponding author:

Zohreh Mahmoodi,

Department of Cardiology,

Faculty of Medicine,

Zabol University of Medical Sciences,

Zabol, Iran. Email: smoon8465@gmail.com,

Tel: +989120644917

QR code



Please cite this article in press as Khadijeh Rezaie Keikhaie and Zohreh Mahmoodi, *Investigating the Prevalence of Abnormal Pathologies in Evacuative Curettage Products in Amir-Almomenin Hospital in Zabol, 2013 To 2016*, Indo Am. J. P. Sci, 2017; 4(06).

INTRODUCTION:

Endometrial biopsy is an outpatient procedure conducted for patients requiring diagnostic curettage. Difficulty in crossing the mouth of the cervix, particularly in nulliparous patients and postmenopausal women, can be troublesome during dilatation, curettage, and hysteroscopy. Possible complications during dilatation, curettage, and hysteroscopy can be caused by two main reasons; first, difficulty in opening the cervix (cervical lacerations, creating a false path, bleeding, and perforation of the uterus) and second difficulty in crossing the internal holes [1]. Diagnostic curettage, endometrial biopsy, and hysteroscopy are some diagnostic methods for patients who are hospitalized with abnormal uterine bleeding. From 1943 onwards, dilation and curettage have been the second most common causes of women surgery in America [2]. Curettage is implemented to diagnose uterine complications, treat forgotten abortions, determine the cause of infertility, ease uterine bleeding discomfort, and control dysmenorrhea. Performing cervical dilation is essential as a preparatory stage for uterine cavity [3, 4]. The definition of abortion signifies intentional culmination of pregnancy prior to 20 weeks, with the embryo weighing less than 500 gr [5]. According to the findings of various conducted studies, 10-20% of pregnancies result in abortion, 80% of which occur in the first trimester [6]. Diagnosing abnormal uterine bleeding is a significant issue in gynecology; given that different diagnosis is presented in different ages and required treatment is conducted according to the diagnosis, age of the patient, and her willingness in keeping pregnancy, obstetricians and gynecologists have constantly been searching for more precise diagnostic methods [7, 8]. The most common causes of abnormal uterine bleeding (AUB) in adults include anovulation, stress, pregnancy, infection, multiple ovarian endocrine disorders, hypothyroidism, hormonal changes caused by the use of contraceptive methods, structural damages (polyps and fibroids), and cancer [9]. With the development of imaging techniques, such as trans vaginal ultrasound which facilitate close measuring of endometrium, this noninvasive, inexpensive method has become more and more effective in distinguishing benign and malignant causes of postmenopausal bleeding [10]. In fact, trans vaginal ultrasound can determine patients with low risk of endometrial diseases; it, also, can discern subjects in need of sampling, in comparison to those in need of hysteroscopy, by showing their abnormalities in the imaging process [11]. Endometrial cancer, the most common clinical symptom of which is, in 95% of cases, abnormal uterine bleeding, is the fourth common malignant cancer in the world and the most common female genital cancer [12]. Cervical cancer, 80% of which occur in undeveloped countries, is the second most common malignancy in women and the leading cause

of death [13, 14]. Cervical cancer is the most common women malignancy, with average age of 19.5 years out of each 100 thousand cases, in Thailand [15]. The main objective of the present study is investigating the prevalence of abnormal pathologies in evacuative curettage products in Amiralmomenin Hospital in Zabol from 2013 to 2016.

MATERIALS AND METHODS:

The present descriptive study included 339 patients, aged more than 35 years old, who underwent diagnostic curettage because of abnormal bleeding in Amiralmomenin Hospital in Zabol from 2013 to 2016. Required data was collected using a researcher-made questionnaire and the results of endometrial pathology test samples obtained at Amiralmomenin Hospital pathology lab was added to the checklist. Information and data regarding the age of the patient, reproductive history, contraceptive pills, history of diabetes and high blood pressure, history of cancer line in the family, and the results of endometrial pathology and diagnostic ultrasound was investigated; collected data was analyzed using SPSS, Version 18 [16-18].

FINDINGS:

Based on the results of the present study, the youngest and the oldest studies subjects aged 35 and 75 years. According to the analysis of the results of sample curettage pathologies, 134 cases (39.5%) had Hyperplasia, 7 cases (2.06%) had cancer, 40 cases (11.79%) had atrophy, 107 cases (31.5%) had normal uterus, and 51 cases (15.04%) had miscellaneous complications; in case of abnormal bleeding complaints, 159 cases (46.9%) had Menorrhagia, 57 cases (16.8%) had metrorrhagia, 43 cases (13.2%) had menometrorrhagia, and 80 cases (23.1%) had postmenopausal bleeding. Minimum and maximum pregnancy rate of the subjects turned out to be 0 and 12, with the average of 4.9 ± 2.6 . 70.8% of subjects had become pregnancy four times and more before; 43 cases (12.68%), none of whom had cancer, took contraceptive pills. 19 cases had Hyperplasia, 21 cases were normal, and 3 cases were diagnosed with miscellaneous complications. 26 cases (7.6%), 9 of whom had hyperplasia, 13 cases had atrophic endometria, and 12 normal cases, had diabetes. 67 subjects (19.76%), two of whom had cancer, 27 had hyperplasia, 14 cases had atrophy, 16 cases were normal, and 8 cases with miscellaneous pathological complications, had high blood pressure. One patient with normal pathology was diagnosed with breast cancer; but, there was no history of breast, colon, or gynecological cancer in her family. Based on the results of the ultrasound, 142 subjects (41.88%), 3 with cancer, 65 with hyperplasia, 21 with atrophy, 38 with normal endometria, and 15 with miscellaneous pathological complications, had increased endometrial thickness. The result of ultrasound

turned out to be normal in 37 cases (10.91%); however, there were 1 case of cancer, 14 cases of hyperplasia, 1 case of atrophy, 13 normal cases, and 8 cases with miscellaneous pathological complications in the results of diagnostic pathology tests. The mean age of patients turned out to be like followings: 45.75 ± 1.86 for cancer, 54.4 ± 1.33 for atrophy, 44.31 ± 0.45 for miscellaneous diagnosis, and 43.45 ± 0.95 for normal subjects. There were 4 cases of menorrhagia, 2 cases of menometrorrhagia, and 1 case of postmenopausal bleeding in patients suffering from cancer. There were. Also, 63 cases of menorrhagia, 33 cases of menometrorrhagia, 15 cases of polymenorrhagia, 13 cases of postmenopausal bleeding, and 10 cases of metrorrhagia in patients suffering from uterine hyperplasia.

DISCUSSION:

46 million of 211 million pregnancies result in abortion each year; one out of four women experience abortion once in their life. Abortion is the cause of 14% of mortality of mothers; thus, preventing abortion-based death requires emergency care, facilities, and abortion performance method in each area. Evacuating uterus and total removing of remaining tissues is key to treating incomplete abortion. Remaining tissues and other pregnancy products is often associated with severe vaginal bleeding, infection, and shock; thus, rapid evacuation of the uterus is essential in such situations. Naturally, women experience uterine bleeding periodically, with an average of 4.7 days, 38ml for each cycle, during pregnancy [7]. Any sort of abnormal bleeding requires investigation and clinical examination mostly to diagnose possible endometrial lesions, in particular hyperplasia, and cancer of the endometrium; the necessity of these preventive processes is more urgent in case of dilation and curettage patients who are aged above 35 years, fat, suffer major anovulation or postmenopausal bleeding, because of the risk of hyperplasia or endometrial cancer [7, 8, 19]. Given the significance of this topic, the present study was conducted to investigate the prevalence of abnormal pathologies in evocative curettage products in Amiralmomenin Hospital in Zabol from 2013 to 2016. Based on the findings of the present study, the most common pathologic finding of patients suffering from abnormal uterine bleeding turned out to be hyperplasia, 39.52, thus, necessitating proper medical or surgical treatment depending on the age or inclination of the patient. The majority of patients complained of menorrhagia and 75% of subjects suffering from cancer turned out to have initially complained of menorrhagia; however, people suffering from hyperplasia were mostly afflicted with menorrhagia, metrorrhagia, and menometrorrhagia. According to Hajishafieha et al study (2006), bleeding was the most common symptom of endometrial cancer in Urmia and it considers medical consultaion necessary for the diagnosis and treatment of these diseases [20], which is in line with the

results of the present study. Subjects with atrophic endometria and those suffering from uterine cancer and hyperplasia had highest mean age and number of pregnancies in order. Based on Melki et al study (2000), entitled "Dilatation and Curettage in the Evaluation of Abnormal Uterine Bleeding: Histopathologic Findings and the Cost/Benefit Relation", pathologic findings categorized advantages and disadvantages of curettage in two groups of above and under 50 years old women; the results showed that 38.3% of the first group were negative pathology and 38.1% were positive pathology; also, 50.2% of the second group turned out to be negative and 39.7% turned out to be positive pathology [21]. According to Rahimi et al study, endometrial hyperplasia is quite effective in the prevalence of abnormal uterine bleeding and it is necessary to investigate and treat hyperplasia risk factors in preventing endometrial cancer [22], which is quite consistent with the findings of the present study. The results of another study, which was conducted to compare the efficacy of curettage and aspiration with manual vacuum in the treatment of incomplete abortion, showed that MVA, due to less surgery time, bleeding, and pain in patients, is more effective than normal curettage in the treatment of incomplete abortion [23]. According to Moradan et al study (2012), which was conducted to investigate pathologies of 92 cases of hysterectomy and 80 cases of diagnostic curettage due to abnormal uterine bleeding, there were 9 cases of endometrial hyperplasia (25.11%), 4 cases of cervical dysplasia (5%), and 67 normal cases (75.83%) in 80 patients with diagnostic curettage; there were, also, 38 cases (41%) of Leiomyoma, 12 cases of endometrial hyperplasia (13%), 6 cases of adenomyosis (5.6%), 6 cases of cervical dysplasia (5.6%), 1 case of endometrial carcinoma (0.9%), 1 case of no exact pathological diagnosis, and 28 normal cases (43.30%) in 92 patients examined with hysterectomy [24]; this is also consistent with the findings of the present study.

CONCLUSION:

According to the results of the present study, abnormal uterine bleeding is the most important clinical sign of endometrial cancer; therefore, it is quite essential for women above 35 years old with uterine bleeding to undergo clinical examination. Given the high prevalence rate of endometrial hyperplasia in abnormal uterine, it is recommended to conduct further studies on the causes of hyperplasia, endometrial cancer prevention, and the impact of hyperplasia treatment.

REFERENCES:

- Cooper KG, Pinion SB, Bhattacharya S, Parkin DE. The effects of the gonadotrophin releasing hormone analogue (goserelin) and prostaglandin E1 (misoprostol) on cervical resistance prior to transcervical resection of the endometrium. BJOG:

- An International Journal of Obstetrics & Gynaecology 1996; 103(4): 375-78.
- 2.Dabaghi T, Elmizadeh Kh, Ghahari S. Evaluation of the Effect of Vaginal Misoprostol on Cervical Priming in Patients Candidate for Dilatation and Diagnostic Curettage: A Randomized Clinical Trial. Qom Univ Med Sci J 2013; 7(4): 23-7.
- 3.Rock JA, Jones HW. TeLinde's Operative Gynecology. 10th ed. New York: Lippincott Williams & Wilkins, 2008.
- 4.Berek JS. Berek and Novak's Gynecology. 14th ed. New York: Lippincott Williams & Wilkins, 2007.
- 5.Yaghmaei M, Ansari -Moghaddam A, Jahani N, Mohtari M. The effect of oral misoprostol on pain scores, duration and amount of vaginal bleeding and endometrial thickness following surgical evacuation for first trimester abortion. J of Rostamineh 2013; 5(2): 25-31.
- 6.Kottke MJ, Zieman M. Management of abortion. In: Rock JA, Jones HW. Telinde, Operative gynecology. Philadelphia: Lippincott Williams & Wilkins, 10th edition, 2011.
- 7.Berek J. Novaks gynecology. Philadelfia: Lippincott Williams and Wilkins, 2002.
- 8.Bronj LD, Almendral AS. Guideline for the diagnosis of post-menopausal bleeding. Rundesh 2000; 40(2): 71-9.
- 9.Jayasinghe Y, Moore P, Donath S, Donath S, Campbell J, Monagle P. Bleeding disorders in teenagers presenting with menorrhagia. Aust NZ J Obstet Gynaecol 2005; 45(5): 439-43.
- 10.Tahmasebi M, Imen M, Razi T. Comparing of the Results of Transvaginal Ultrasonography with Dilatation and Curettage Findings in Evaluation of Endometrial Cancer in Women with Postmenopausal Bleeding. Jundishapur Sci Med J 2012; 11(3): 229-40.
- 11Gale A, Dey P. Postmenopausal bleeding. Menopause international 2009; 15(4):160-4.
- 12.American College of Obstetricians and Gynecologists. ACOG practice bulletin, clinical management guidelines for obstetrician-gynecologists, number 65, August 2005: management of endometrial cancer. Obstetrics and gynecology 2005; 106(2): 413-25.
- 13.Limpvanuspong B., Tangjitsamol S, Manusirivithaya S, Khunnarong J, Thavaramara T, Leelakahorn S. Prevalence of high grade squamous intraepithelial lesions (HSIL) and invasive cervical cancer in patients with atypical squamous cells of undetermined significance (ASCUS) from cervical Pap smears. Southeast Asian Journal of Tropical Medicine and Public Health 2008; 39(4): 737-44.
- 14.Nokiani FA, Akbari H. Prevalence of invasive and pre-invasive cervical lesions in Kermanshah, 2003-2007. Journal of Qazvin University of Medical Sciences 2009; 13(1): 42-8.
- 15.Khuakoonratt N, Tangjitsamol S, Manusirivithaya S, Khunnarong J, Pataradule K, Thavaramara T, Suekwattana P. Prevalence of high grade squamous intraepithelial lesion (HSIL) and invasive cervical cancer in patients with low grade squamous intraepithelial lesion (LSIL) at cervical pap smear. Asian Pac J Cancer Prev 2008; 9(2): 253-57.
- 16.Havasian MR, Panahi J, Khosravi A. Correlation between the lipid and cytokine profiles in patients with coronary heart disease (CHD)(Review article). Life Science Journal 2012; 9(4): 5772-77.
- 17.Malekzadegan A, Havasian MR, Aali H, Salarzaei M, Ganjali M. The Study of Epidemiology and Hydatid Cyst Primary and Final Diagnosis in Patients Hospitalized in The Surgery Unit of Shahid Daneshvari Hospital, Tehran, Iran 2007 To 2017. Indo Am. J. P. Sci, 2017; 4(05):1060-63.
- 18.Mahmoodi Z, Havasian MR, Esmail-Zahikurin B, Salarzaei M. Investigating Critical Blood Pressure Risk Factors in Zabol, Amir-Al-Momenin Hospital Patients in 2015-2016. Indo Am. J. P. Sci, 2017; 4(05): 1083-87.
- 19.Rock JA. Normal and abnormal uterine bleeding. Telinds Operative Gynecology. 9th ed. Philadelphia: Lippincott Williams: and Wilkins, 2003.
- 20.Hajishafieha T, Zobeiri F, Boroomand R, Oroji M, Rajabpoor.A comparative study of sonohysterography with diagnostic curettage in patients with abnormal uterine bleeding.Urmia Med J 2006;17(3): 245-6.
- 21.Melki LA, Oliveira MA, Tostes Filho W, Assumpção AM, Oliveira HC. Dilatation and Curettage in the Evaluation of Abnormal Uterine Bleeding: Histopathologic Findings and the Cost/Benefit Relation. Revista Brasileira de Ginecologia e Obstetrícia 2000; 22(8): 495-502.
- 22.Rahimi M. Prevalence of hyperplasia of diagnostic curettage in patients with abnormal uterine bleeding in mahdiyeh hospital. 1999; 6(2): 18-24.
- 23.Khani B, Karami N, Khodakarami N, Solgi T. Comparison of Incomplete Abortion Treatment between Manual Vacuum Aspiration and Curettage. Journal of Isfahan Medical School 2010; 27(102): 753-61.
- 24.Moradan S. Evaluation the pathologic reports of 92 cases of hysterectomy and 80 cases of diagnostic curettage in patients with abnormal uterine bleeding. Zahedan J Res Med Sci 2012; 13(suppl 1): 37-42.