Journal of
Gynecology and Women's Health
ISSN 2474-7602

Juniper Publishers
key to the Researchers

Research Article
Volume 22 Issue 4 - July 2022
DOI: 10.19080/JGWH.2022.22.556091

J Gynecol Women's Health

The Use of A Uterine Balloon for the Treatment of Abnormal Uterine Bleeding

Khaskhachykh Dmytro*

Dnipro State Medical University, Dnipro, Ukraine

Submission: July 01, 2022; **Published:** July 11, 2022

***Corresponding author:** Dr. Khaskhachykh Dmytro, Dnipro State Medical University, Dnipro, Ukraine

Abstract

Background: The article presents an overview of our experience of using intrauterine tamponade with Bakri-type balloon catheters of the original design in the treatment of abnormal uterine bleeding (ABH) in women.

Purpose: To investigate the effectiveness of using a uterine balloon for the first stage of stopping abnormal uterine bleeding in women.

Patients and Methods: A prospective observational study has been performed on case series report of 45 patients in whom intrauterine balloon tamponade was used for recurrent AUB as a means of emergency bleeding control during the period from October 2021 to Joinery 2022. We identified these patients according to the PALM-COEN classification.

Results: The applied balloon tamponade of the uterus at the first stage of complex therapy to stop uterine bleeding with subsequent clarification of the cause and pathogenetic treatment. When the catheter was installed, it was possible to stop uterine bleeding in 100% of cases. Subsequently, these women received conservative or operative treatment, depending on the detected pathology.

Conclusion: The conducted research was that balloon hydrotamponade of the uterus is a simple, safe and quite effective auxiliary tool at the first stage of treatment of AUB caused by various causes, especially in case of their recurrence, which helps to reduce the volume of bleeding, improve the effectiveness of diagnosis and therapy.

Keywords: Abnormal uterine bleeding; Balloon; Tamponade of the uterus; Treatment; PALM-COEN

Abbreviations: AUB: Abnormal Uterine Bleeding

Introduction

Abnormal uterine bleeding (AUB) is a broad term that describes irregularities in the menstrual cycle involving frequency, regularity, duration, and volume of flow outside of pregnancy. Up to one-third of women will experience abnormal uterine bleeding in their life, with irregularities most commonly occurring at menarche and perimenopause. A normal menstrual cycle has a frequency of 24 to 38 days, lasts 7 to 9 days, with 5 to 80 milliliters of blood loss. Variations in any of these 4 parameters constitute abnormal uterine bleeding [1]. For the period 2015-2016, the incidence of menstrual function disorders in women of reproductive age increased by 4.5 % from 10.52 % 2015 to 11.02 % 2020 [2,3]. According to our data, the frequency AUB per year. 15.3% in the structure of gynecological pathologies, of which severe uterine bleeding up to 17%.

AUB can have a diverse nature and are classified according to the FIGO classification according to PALM-COEN [4], and all causes are united by one symptom-uterine bleeding. AUB deserves special attention when conservative methods of treatment, diagnostic curettage do not give a positive effect, or such bleedings give recurrences. Severe or recurrent uterine bleeding can lead to anemia, mostly iron deficiency, chronic hypoxia and dysfunction of internal organs [5]. Violation of normal sexual life leads to psychological changes and loss of social adaptation.

Therefore, there is a need for a simple and effective means for stopping uterine bleeding, which would solve the problems of effective and quick stopping of uterine bleeding for various reasons that lead to AUB. The analysis of public information for 10 years in the Pubmed information space showed that the use of balloon

tamponade is devoted to about 720 scientific publications, mainly in obstetrics, but with regard to its use in gynecology for the treatment of AUB, this method is rarely used. Many publications are devoted to balloon thermal ablation of the endometrium using the TermaChoice balloon (Cavaterm) in endometrial pathology or as anti-adhesion barriers after endometrial resection or ablation to prevent Asherman syndrome, but this method was not used to stop acute AUB [6-11].

Materials and Methods

The study was conducted in the department of emergency and urgent gynecology of the KNP «MKL №9» of the DMR in the period from October 2021 to Joinery 2022. The research group consisted of 45 women who were urgently hospitalized. Women had such pathology as endometrial hyperplasia without atypia (33%), uterine leiomyoma with hemorrhagic syndrome (36%), violation of the ovarian-menstrual cycle (31%). The average age is 29.4±1.2 years, body weight-74±3.1kg, height-163.5±1.5cm). Criteria for inclusion in the study: age from 18 to 45 years; presence of relapse of AUB; absence of serious extragenital chronic diseases; body mass index 18.5-30. Exclusion criteria: presence of diagnosed coagulopathy; oncological processes; decompensated extragenital pathologies.

Results and Discussion

The main complaint was profuse uterine bleeding with clots. The volume of blood loss was more than 80 ml, the hemoglobin level was 97±16 g/l. When the catheter was installed, it was possible to stop uterine bleeding in 100% of cases. In all cases of using balloon hydrotamponade of the uterus, a quick positive effect on stopping uterine bleeding was achieved. In (Figure 1) present a diagram of the use of balloon hydrotamponade of the uterus. The effectiveness of the proposed method is demonstrated by the following example. Patient A., 42 years old, was admitted to the gynecology department with a recurrence of abnormal uterine bleeding (AUB). Secondary anemia. A month ago, curettage of the uterine cavity was performed due to AUB.

Figure 1: Insertion of the balloon into the uterine cavity.

In the future, oral progestogens were prescribed, which the patient did not take systematically. According to the results of clinical, laboratory, ultrasound and histological examination, AUB was classified according to PALM COEN as P0A0L0M1-C0O0E0N0. After the woman's re-admission, in the case of a traditional approach to treatment, she was shown again to perform curettage of the uterine cavity with the subsequent appointment of hormonal therapy, or surgical treatment in the form of hysterectomy. Balloon tamponade of the uterus was chosen for the treatment of this case. A uterine balloon was inserted into the uterine cavity and hydrotamponade of the uterus was performed. Uterine bleeding has stopped. To prevent recurrence of bleeding, goserelin acetate 3.6mg was administered subcutaneously. The woman was discharged home on the same day. After an additional examination, the woman was prescribed oral iron preparations for the treatment of anemia (Hb 92g/l).

After 3 days, the balloon was removed. Hemorrhagic discharge was scanty. Subsequently, the woman received 2 injections of goserelin acetate 3.6 mg subcutaneously, and after the end of the treatment, an intrauterine system with levonorgestrel was installed. After 3 and 6 months, a papilloma biopsy of the endometrium was performed, which showed the absence of endometrial hyperplasia. In the future, observation showed no recurrence of

How to cite this article: Khaskhachykh D. The Use of A Uterine Balloon for the Treatment of Abnormal Uterine Bleeding . J Gynecol Women's Health. 2022: 22(4): 556091. DOI: 10.19080/JGWH.2022.21.556091

bleeding. The woman developed drug-induced amenorrhea. The satisfactory condition of the woman and the absence of recurrence of the disease was considered an effective approach to organ-preserving treatment of this pathology when balloon hydrotamponade of the uterus was used at the first stage of treatment.

Conclusion

Balloon tamponade of the uterus is a simple, safe and quite effective auxiliary tool at the first stage of treatment of AUB caused by various reasons, especially in case of their recurrence, which helps to reduce the volume of bleeding, improve the effectiveness of diagnosis and therapy. Further research on the method of balloon hydrotamponade of the uterus as the first stage of treatment of AUB, especially in recurrent forms of endometrial hyperplasia in women of reproductive age, can improve its effectiveness and reduce the number of surgical interventions.

Acknowledgement

The authors of this study possess no acknowledgments to make with regards to this study and this manuscript's content.

References

1. Davis E, Sparzak PB (2022) Abnormal Uterine Bleeding. StatPearls.
2. (2016) Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care for abnormal uterine bleeding. Order of the Ministry of Health of Ukraine №353, 40.
3. Jain V, Chodankar RR, Maybin JA, Critchley H (2022) Uterine bleeding: how understanding endometrial physiology underpins menstrual health. Nature Reviews Endocrinology 18(5): 290-308.
4. Munro MG, Critchley H, Fraser IS, FIGO Menstrual Disorders Committee (2018) The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. Int J Gynaecol Obstet 143(3): 393-408.
5. Khaskhachikh DA, Potapov VO, Kukina GO, Gaponova OV (2021) The state of water sectors in women with severe abnormal uterine bleeding. Modern engineering and innovative technologies 5(15): 86-89.
6. Blanch FL, Estadella TJ, Simo GM, Rams LN, Longo A, et al. (2020) Use of an Intrauterine Foley Probe for Ultrasound-Assisted Hysteroscopic Resection of Complete Uterine Septum. Journal of minimally invasive gynecology 27(3): 581.
7. Lu YM, Guo YR, Zhou MY, Wang Y (2020) Indwelling Intrauterine Foley Balloon Catheter for Intraoperative and Postoperative Bleeding in Cesarean Scar Pregnancy. J Minim Invasive Gynecol 27(1): 94-99.
8. Kdous M, Jacob D, Gervaise A, Risk E, Sauvanet E (2008) [Thermal balloon endometrial ablation for dysfunctional uterine bleeding: technical aspects and results. A prospective cohort study of 152 cases]. Tunis Med 86(5): 473-478.
9. Gervaise A, Fernandez H, Capella-Allouc S, Taylor S, La Vieille S, et al. (1999) Thermal balloon ablation versus endometrial resection for the treatment of abnormal uterine bleeding. Human Reprod 14(11): 2743-2747.
10. Kleijn JH, Engels R, Bourdrez P, Mol BW, Bongers MY (2008) Five-year follow up of a randomised controlled trial comparing NovaSure and ThermaChoice endometrial ablation. BJOG 115(2): 193-198.
11. Romer T (1998) [Therapy of recurrent menorrhagia--Cavaterm balloon coagulation versus roller-ball endometrium coagulation--a prospective randomized comparative study]. Zentralblatt fur Gynakologie 120(10): 511-514.

DOI: 10.19080/JGWH.2022.21.556091

How to cite this article: Khaskhachykh D. The Use of A Uterine Balloon for the Treatment of Abnormal Uterine Bleeding . J Gynecol Women's Health. 2022: 22(4): 556091. DOI: 10.19080/JGWH.2022.21.556091