

## Successful Management of Acute Heavy Menstrual Bleeding with Foley's Catheter of a Patient under Combined Antiplatelet Therapy for Cardiac Disease: A Case Report

Kardiyak Hastalık Nedeniyle Kombine Antiplatelet Tedavi Altındaki Bir Hastada Ağır Menstrüel Kanamanın Foley Kateter ile Başarılı Yönetimi:Olgu Sunumu

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### ABSTRACT

Heavy menstrual bleeding(HMB) is one of the most common gynecological problems defined as a menstrual blood loss of 80 ml or higher. Here we described a case of a patient who applied with acute heavy uterine bleeding under anticoagulant therapy. Although the final management plan was hysterectomy as a definitive treatment for this patient, a silicone Foley catheter was used as an emergency treatment for active massive uterine bleeding. The report demonstrates that intrauterine balloon tamponade can be used for the patient with acute heavy uterine bleeding as a temporary rescue treatment modality.

**Key Words:** Heavy menstrual bleeding; anticoagulant therapy; Foley's catheter

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### ÖZET

Ağır adet kanaması, adet kanamasının 80 ml veya daha fazla olması olarak tanımlanan en yaygın jinekolojik problemlerden biridir. Burada antikoagulan tedavi altında akut ağır uterin kanaması ile başvuran bir olguyu anlattık. Bu hasta için nihai tedavi planı histerektomi olmasına rağmen, aktif masif uterin kanamada acil tedavi olarak silikon Foley kateter kullanıldı. Bu bildiri, intrauterin balon tamponadının geçici bir kurtarma tedavisi yöntemi olarak akut ağır uterin kanaması olan hastalarda kullanılabileceğini göstermektedir.

**Anahtar Sözcükler:** Ağır menstrüel kanama; Antikoagulan tedavi; Foley kateter

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## INTRODUCTION

Heavy menstrual bleeding (HMB) is defined as a blood loss of at least 80 ml or higher in each period. It affects approximately 20% of women under anticoagulant therapy. About 10-20% of these patients using the anticoagulant treatment and suffering from HMB results in iron deficiency and 2.5% results in anemia (1,2). HMB could affect the physical and social quality of life, such as body ache, tiredness and social diffidence, and places a heavy burden on the health care system (3,4). Blood loss increases with age and is remarkably higher in women over the age of 40 compared to younger women during menstruation (5). Anticoagulant drug use after coronary artery bypass and stent replacement may give rise to or exacerbate abnormal uterine bleeding (AUB). HMB is aggravated not only in those taking vitamin K antagonists but also in combined antiplatelet therapy users or with the concomitant use of acetylsalicylic acid (ASA) and clopidogrel (6,7).

We report the case under anticoagulant therapy with acute heavy uterine bleeding where surgical intervention was not possible because of concomitant use of acetylsalicylic acid and clopidogrel.

## CASE REPORT

A 47-year-old patient G4, P4, applied to emergency service with heavy vaginal bleeding for three days. Physical examination revealed that she had profuse vaginal bleeding with large clots in the vagina coming from the cervical os. Transvaginal sonography has shown an endometrial thickness of 8.4 mm and submucous leiomyoma with a diameter of 34 mm in the endometrial cavity. Measurement of vital signs showed blood pressure of 140/85 mm Hg, a pulse rate of 72 beats/min, a  $SpO_2$  of 96%, a temperature of 36.3°C. On the laboratory test, hemoglobin level was 8.9 g/dL, hematocrit of 27%, platelet count of 457,000  $mm^3$ , prothrombin time of 14.1 seconds, activated partial thromboplastin time of 22.7 seconds and international normalized ratio of 1.07. However, prolonged bleeding time was determined, which was resulted in 17 seconds.

She had a history of dilatation and curettage for menometrorrhagia a month ago in another hospital. Endometrial fragments reported as endometrial polyp on histopathology. Her hemoglobin level was 6.9 g/dL and 2 units of red blood cell infusion were given immediately after D&C. She had applied to second medical center with complaint of abnormal uterine bleeding one month after D&C. Levonorgestrel-containing intrauterine device (Mirena) had been inserted in this second medical center. Three days after Mirena insertion she applied third hospital with lower abdominal pain. Dislocated Mirena had been found and removed at that center. Since she was under anticoagulant therapy for coronary artery disease she was sent to our department as a reference University hospital.

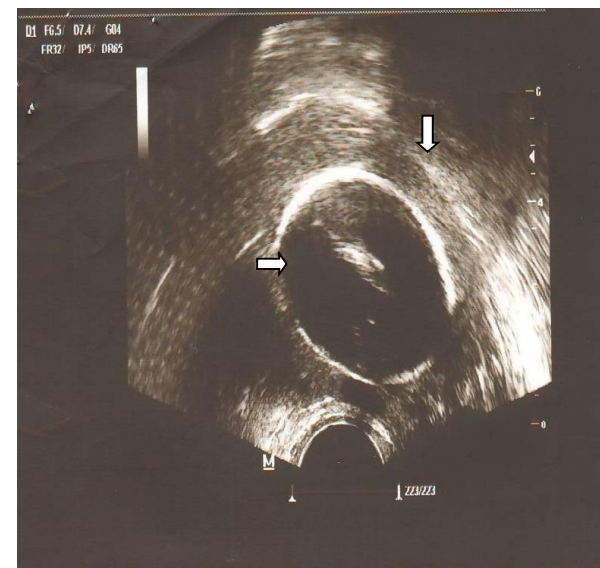
She had a history of myocardial infarction, asthma, hypothyroidism. She had coronary artery bypass surgery twice in four years and followed by coronary artery stent placement. She was taking clopidogrel 75 mg/day and ASA 100 mg/day. The patient had not gone to the cardiology department regularly for her cardiac disease and her medical therapy.

Although the final management plan was hysterectomy as a definitive treatment for this patient, a silicone Foley's catheter was used as an emergency treatment for active massive uterine bleeding. A 16 French Foley's catheter was placed in the uterine cavity, and the balloon was inflated with 30 ml of saline solution until the maximum capacity of the uterine cavity was reached. After this procedure, bleeding was abruptly stopped. There was no evidence of hematoma around the intrauterine Foley catheter and retrograde tubal bleeding. The patient has become hemodynamically stable.

We could not perform the operation until the 5<sup>th</sup> day of admission due to clopidogrel and acetylsalicylic acid use, which caused severe hematological instability of the patient. She was given ceftriaxone 1g twice a day i.v. for five days during this period. The patient underwent total laparoscopic hysterectomy on the 5<sup>th</sup> day of hospitalization. Postoperative period was uneventful. She was discharged with only acetylsalicylic acid medication with the recommendation of the cardiology department.



**Figure 1:** Transvaginal ultrasonography scan of 33x34 mm submucous leiomyoma eroded to endometrial cavity



**Figure 2:** Balloon of Foley's catheter was inflated with 30 ml of saline in the uterine cavity

## DISCUSSION

The management of HMB on anticoagulant and antiplatelet therapy decision-making needs to balance the risk of thrombosis compared to the risk of bleeding. No antidote to the pharmacological activity of clopidogrel has been found, so we are limited for surgery during heavy menstrual bleeding under antiplatelet therapy. The patient didn't go to the cardiology department regularly for her cardiac disease and her medical treatment. Effective treatment options for patients with HMB under anticoagulant therapy are the placement of a hormone-releasing intrauterine device or a hormonal contraceptive, and neither are associated with an increased VTE risk (8,9). Tranexamic acid is another treatment choice during the menstrual period, although its safety profile and efficacy have not been well documented (10,11). Since the mentioned treatment modalities are not very effective in acute HMB, the use of intrauterine balloon tamponade is a good temporary choice for acute active uterine bleeding that has been described previously (12,13). Foley catheter is an effective and cheap emergency rescue method for acute HMB for a patient under antiplatelet therapy until the patient is prepared for hysterectomy.

In this case, initially, the patient had been tried to be managed by a hormone-releasing intrauterine device. Unfortunately, this treatment modality was failed, and the patient using antiaggregant applied to the emergency unit with acute HMB. There was no antidote for these antiaggregant drugs. Therefore, the mechanical barrier seemed to be the only choice for the control of uterine bleeding. It was a successful procedure for the patient. No complications were seen, and hemodynamic stabilization was provided until surgery time.

In conclusion, intrauterine balloon tamponade can be used for the patient with acute heavy uterine bleeding as a temporary rescue treatment modality.

#### Conflict of interest

No conflict of interest was declared by the authors.

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