

# Anemia due to Uterine Bleeding: A Case Report

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## Abstract

Anaemia is a condition of multifactorial basis that affects about 25% of world population. Sudden loss of 50% of blood leads to death due to hypovolemic shock, but chronic longstanding non-significant bleeding without rapid decrease in haemoglobin level can be tolerated and compensated for a very long period. In this case report we present a 40-year-old fully conscious female with abdominal pain which was manifested with haemoglobin level of 1.8 g/dl.

**Keywords:** Anaemia • Haemoglobin • Abdominal pain • Uterine leiomyomas

## Introduction

Anaemia leads to a decrease in red blood cell mass [1]. Highest prevalence of anaemia is in preschool age children ~50%. Men are the group of the lowest prevalence ~12%. Population group with the greatest number of individuals affected is non-pregnant women about half a billion worldwide [2]. Chronic menorrhagia due to uterine leiomyomas is a common cause of anaemia in women of reproductive age. Uterine leiomyomas better known as fibroids are monoclonal benign soft tissue neoplasms of smooth muscle. They can occur at any age between menarche and menopause. The etiology of uterine fibroids is unknown. Genetic theory is popular, their grow this strictly related to oestrogens other risk factors are modifiable: Vitamin D level, obesity, diet, and smoking (reduce) [3,4]. Over 70% of white women and 80% of black women will have one or more fibroids in reproductive age [5]. They can be fully asymptomatic or present wide range of signs from abdominal pain to massive bleeding and miscarriage while pregnancy or lower back pain.

## Case Presentation

A 40-year-old woman was brought by an ambulance to the emergency department with abdominal pain, weakness and prolonged uterine bleeding for a few weeks. There were symptoms of hypovolemic shock due to bleeding and vomiting, heart rate was 107 per minute, blood pressure 114/45 mmHg, saturation 98%, respiration rate 16 per minute, body temperature 36.4°C. She had a history of alcohol dependence and irregular uterine bleeding without any diagnosis.

Because of low social status, she neglects gynaecological care. She

denied melaena or blood stool, coffee ground vomitus, drug abuse, renal disease or prosthetic valves. The examination showed pale-yellow skin, normal vesicular murmur over the lungs, forced foetal position on the right side due to abdominal pain. Abdominal examination shows tenderness in the hypogastric region with palpable thinning, without peritoneal signs and lower limb oedema. In per rectum examination, no signs of pathology and a trace amount of light brown loose stool, without blood, mucous or clots. There was a trace of fresh blood over the labia. During the visit to the emergency department; three different tests were performed showing haemoglobin value of 1.8 g/dL (blood morphology). The bedside ultrasound examination showed the enlarged heterogeneous uterus, no signs of metastasis, ascites or other pathology (Table 1).

**Table 1.** Morphology of 40 year old women with chronic uterus bleeding.

Body fluids	Value	Range
WBC	13.78 G/l	3.9-10.2
RBC	1.33 T/l	4.0-5.0
HGB	1.8 g/dl	42705
HCT	0.078	37-47
MCV	58.6 fl	80-99
MCH	13.5 pg	27.0-33.5
MCHC	23.1 g/dl	31-37
RDW	0.246	11.5-14.5
PLT	336 G/l	130-400

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In Emergency Department, there were 4 U of universal blood transfused; the patient was consulted by a gynaecologist. Because of chronic bleeding and extremely low Hg level she was qualified for uterine curettage after stabilization of the patient's general condition. She was transferred to the internal ward, she received blood transfusion: 9 U of RBC, 4 of FFP. Following stabilization of general condition, the patient was consulted gynecologically.

## Endoscopy

Two papillary lesions on the ectocervix, diameter up to about 7 cm, scant bloody discharge in the vagina. Per vaginam, the uterine body is anteflexed, enlarged, 1.5 fists in size, movable, painless, appendages bilaterally without pathological resistance and soreness on palpation.

## USG TV

The uterine body is anteflexed, enlarged, echogenically heterogeneous, AP 72 mm, homogeneous endometrium is 3.8 mm, compressed by fibroid. In the posterior wall, there is an intramural fibroid compressing the uterine cavity—a lesion of 63 mm × 60 mm. The right ovary, 43 mm × 29 mm, with two follicles 21 mm and 19 mm in diameter. The left ovary, 27 mm × 19 mm, is norm echogenic. In the pouch of Douglas, there is a small amount of free fluid—a pocket up to 9 mm in depth. Due to the high level of tumour markers: Ca 12, HE 4, Ca 19-9, CEA, she was qualified for an urgent diagnosis. A bivalve speculum was inserted into the vagina and scanty bleeding from the uterus was found, and two papillary lesions on the vaginal portion of the cervix (on the anterior lip approx. 8 mm in diameter, on the posterior lip approx. 3 mm in diameter). The vaginal portion of the cervix was grasped with bullet forceps and pulled downwards. The length of the uterine cavity was checked with a uterine probe. The cervical canal was dilated to Hegar No. 6.5. Curettage of the cervical canal and then of the uterine cavity was performed. Specimens were collected from both lesions located on the ectocervix. Tissue material for histopathological examination was secured from each of the sites.

## Results and Discussion

The patient was discharged in stable general condition with the recommendation to come with histopathology results. After 12 days, the patient returned to the Gynaecology Department with the diagnosis of adenocarcinoma endometrialis G2-hysterectomy was performed. The patient was qualified for brachytherapy [6].

This case show how a young organism with no co-morbid conditions can adapt to such a low hemoglobin (1.8 g/dl) level due to chronic bleeding in a stable clinical condition. Women's addiction to alcohol, low social status and frequent alcohol overdose lead to neglecting all symptoms and avoiding medical help for several months. This case adds to other case reports of patient survival with a hemoglobin level of <2 g/dL [7-11]. According to World Health Organization (WHO), around 18 million women aged 30-55 suffer from excessive blood loss during the regular menstrual cycle. 10% of them will experience bleeding that leads to anaemia.

Nearly 30% of all performed in the United States hysterectomies are due to heavy menstrual bleeding. In this patient, the cause of the bleeding was heterogeneous: A fibroid and a neoplastic lesion. The patient was qualified for an urgent oncological surgery and brachytherapy.

European Union (EU) health policy seeks to give all people living in EU access to high quality health care. Although there is easily accessible high quality free medical care in Poland, 7% of women never ask there gynaecologist for cytological tests and 14% haven't been examined with ultrasound [12-14]. 40% of polish woman doesn't see the need for regular examination, 27% visits gynaecologist in connection with pregnancy for the first time.

## Conclusion

The only hope is for better health campaigns aimed at raising public awareness and obligatory periodic examination. The uniqueness of this case is associated with the lowest haemoglobin level reported in the literature in a patient with chronic genital bleeding. Clinicians in gynaecology departments and emergency departments should be vigilant and monitor haemoglobin level in every patient with chronic, even slight bleeding, in connection with the healthy body adaptability described in this case.

## Conflicts of Interest

The authors declare that they have no conflicts of interest and nothing to disclose.

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