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Case Report

## A rare case of nulligravida with abnormal uterine bleeding, bicornuate uterus, iron-deficiency anaemia, thrombocytopenia and connective-tissue disorder features

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### ABSTRACT

Abnormal uterine bleeding (AUB) frequently causes iron deficiency anaemia; however, coexistence with thrombocytopenia and uterine anomaly is unusual. A 30-year-old nulligravida presented with severe AUB and marfanoid features. Laboratory evaluation showed iron-deficiency anaemia and thrombocytopenia refractory to transfusion. Imaging and intraoperative findings confirmed a bicornuate unicollis uterus with adenomyosis. Total abdominal hysterectomy resulted in normalization of platelet count postoperatively. Severe AUB out of proportion to typical presentation should raise suspicion of Mullerian anomaly. Definitive surgical management can reverse hematologic abnormalities in select cases.

**Keywords:** AUB, Bicornuate uterus, Thrombocytopenia, Iron-deficiency anaemia, Adenomyosis

### INTRODUCTION

Abnormal uterine bleeding (AUB) affects up to 40% of reproductive-age women and remains a major cause of iron-deficiency anemia.<sup>1</sup> Congenital Müllerian anomalies can compound menstrual blood loss by increasing endometrial surface area.<sup>2,3</sup> Bicornuate uterus (American Society for Reproductive Medicine Class IVb) results from incomplete fusion of Müllerian ducts.<sup>4</sup> Iron deficiency anemia is associated commonly with thrombocytosis; however, severe deficiency can rarely lead to thrombocytopenia due to impaired iron-dependent enzymatic activity in megakaryocyte maturation.<sup>5</sup>

### CASE REPORT

A 30-year-old nulligravida presented with irregular menstrual cycles since menarche and progressively heavy

bleeding over two recent cycles. Last menstrual period was two months prior.

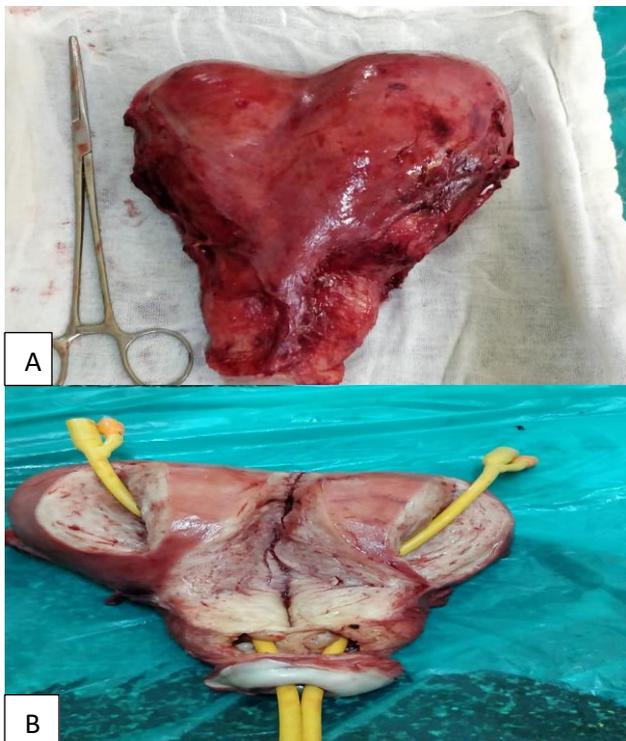
Examination showed pallor and platynychia. On abdominal palpation, a 20-24-week-sized asymmetrical uterus-like mass was noted. Hemoglobin was 6 g/dl; iron studies confirmed iron deficiency anemia. Platelet count was 60,000/mm<sup>3</sup>, refractory to six units of transfused platelets. Echocardiogram revealed mitral valve prolapse with mild mitral and tricuspid regurgitation. Ultrasound abdomen showed splenomegaly; pelvic ultrasound reported uterus of 17×7×14 cm with possible fibroids. Marfanoid phenotype was also noted—high-arched palate, long arms, arm-span greater than height, hyperextensible joints, valgus toes as shown in Figures 1 and 2.

She was managed surgically as she refused medical management. Given severe symptomatic AUB with

refractory thrombocytopenia, definitive surgical management was planned.



**Figure 1 (A and B): Images showing marfanoid features.**



**Figure 2 (A and B): Intraoperatively noted bicornuate unicollis uterus.**

A total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. Intraoperatively, bicornuate unicollis uterus with adenomyosis was confirmed. Uterus weighed 1.25 kg. Postoperative recovery was uneventful and platelet count normalized to 1.7 lakh/mm<sup>3</sup>. Platelets remained normal at 6 week follow up.

## DISCUSSION

Adenomyosis is known to cause menorrhagia; however, bicornuate uterus increases endometrial surface area, compounding menstrual loss. Typically, iron deficiency anemia results in reactive thrombocytosis via erythropoietin driven megakaryocyte stimulation; however, in rare cases of severe deficiency, thrombocytopenia may occur due to disruption in iron dependent enzymes required for platelet formation.<sup>5,6</sup> Marfanoid phenotype raises suspicion for underlying connective tissue related hematologic vulnerability, although genetic analysis was not done.<sup>7</sup> Very few case reports demonstrate reversal of thrombocytopenia after hysterectomy for chronic blood loss—our case supports the pathophysiologic link.<sup>8-10</sup>

## CONCLUSION

Severe AUB out of proportion to expected presentation requires structural evaluation to rule out uterine anomalies such as bicornuate uterus. Definitive surgical treatment can successfully restore hematologic abnormality.

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## REFERENCES

1. Berek JS, Berek NE and Novak's Gynecology. Lippincott Williams and Wilkins. 2007. Available at: <https://www.exampleurl.com>. Accessed on 28 November 2025.
2. Grimbizis GF, Gordts S, Di Spiezio Sardo A, Brucker S, De Fazio A, Gergolet M, et al. The ESHRE ESGE consensus on the classification of female genital tract congenital anomalies. Hum Reprod. 2013;28(8):2032-44.
3. American College of Obstetricians and Gynecologists. Diagnosis of abnormal uterine bleeding. Obstet Gynecol. 2012;120(1):197-206.
4. Munro MG, Critchley HO, Broder MS, Fraser IS. The FIGO classification of causes of abnormal uterine bleeding (PALM COEIN). Int J Gynecol Obstet. 2011;113(1):3-13.
5. Ibrahim R, Khan A, Raza S. Triad of iron deficiency anemia, severe thrombocytopenia, and menorrhagia — a case report. Clin Med Insights Case Rep. 2012;5:23-7.
6. Falah N, AlMomen AK. Hematologic manifestations of iron deficiency. Blood Rev. 2021;45:100693.

7. Dietz HC, Loeys B, Carta L, Ramirez F. Marfan syndrome. *Nat Rev Dis Primers.* 2017;3:17052.
8. Troiano RN, McCarthy SM. Müllerian duct anomalies: imaging diagnosis and clinical implications. *Radiology.* 2004;233(1):19-34.
9. Parazzini F, Vercellini P, Panazza S, et al. Adenomyosis and menstrual bleeding patterns. *Obstet Gynecol Clin North Am.* 1995;22(3):569–76.
10. Indraccolo U, Barbieri F. Hematologic recovery after hysterectomy in chronic anemia. *J Gynecol Surg.* 2010;26(1):11–5.

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