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Abnormal Uterine Bleeding due to Coagulopathies (AUB-C)

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Introduction

AUB-C encompasses the spectrum of systemic disorders of hemostasis that may be associated with coagulopathy. 13% of women with HMB have biochemically detectable systemic disorders of hemostasis, most often von Willebrand disease [1]. Inherited abnormalities of hemostasis include Von Willebrand disease, platelet function defects and other rare defects of coagulation. Thrombocytopenia is the most common cause of acquired abnormality [2]. Case series presented to us in 2023 are being discussed.

Case Series

	Case 1	Case 2	Case 3	Case 4
Clinical Presentation	Acute episode of Heavy menstrual bleeding	For Medical termination of pregnancy	Dysmenorrhea h/o endometriosis+	Abdominal pain
Age in Years	23	38	22	27
Marital and Past Obstetric History	Unmarried	G2P1L1 1FTND	Nullipara Married*3 years	P2L2 2 FTND
Past History at Diagnosis	*VWD TYPE 3- 7yrs (epistasis) *H/o multiple blood transfusion for HMB.	*GLANZMANN THROMBASTHENIA (gum bleeding) 32 years *h/o multiple blood transfusion for HMB and 2* PPH	*BERNARD SOULIER SYNDROME 16yrs (petechiea) *h/o endometriosis multiple episodes of hemoperitoneum- conservatively managed *h/o multiple blood transfusion for HMB and on trivial trauma	*h/o Epistasis and hematemesis at 5 years *h/o multiple blood transfusion for HMB *h/o Hemoperitoneum 1 year back conservatively managed IMMUNE THROMBOCYTOPENIA diagnosed now
Family History	2 brothers VWD type 3	-	Sister ? VWD	Sister ? VWD
Diagnostic Criteria	*Von Willebrand factor antigen assay, *Ristocetin factor activity *Factor 8 coagulant activity (3)	*Light transmission aggregometry *Flow cytometry (4)	*Flow cytometry *Ristocetin induced platelet aggregation test (5)	*Low platelet count *Peripheral smear- large platelets and tiny platelet fragments *Bone marrow-increased megakaryocytes (6)
Management	*Von Willebrand factor replacement *Desmopressin *Anti fibrinolytic (3)	*Platelets recombinant activated clotting factor VII *Hormone therapy (4)	*Platelet transfusion *Antifibrinolytic therapy *Desmopressin (5)	*Corticosteroids *Intravenous immunoglobulin *Anti-RHD immune globulin (6)
Management given	*3unit PRBC transfused *Supportive measures *Started on progesterone tablets	*Evacuation done *2unit PRBC transfused *1 unit SDP transfused	*Hemoperitoneum 1unit PRBC, 3 units PRP, 2 units SDP transfused *Started on OCP	*Ruptured ovarian hemorrhagic cyst *4unit PRBC, 7 PRP, 2unit FFP transfused *Methylprednisolone 3 doses given

Discussion

VWD is caused by decreased or defective production of VW protein, involved in platelet function and serves as a stabilizing agent for coagulation [3]. During pregnancy, in antenatal period- levels of VWF:RCo and FVIII:C assessed, during labour- VWF/FVIII concentrates and tranexamic acid used to control PPH and newborn is screened for the disease[4].

Glanzmann thrombasthenia is caused by a deficiency of the platelet integrin alpha IIB beta3 essential for platelet aggregation and hemostasis [5]. During pregnancy, in antenatal period- test for anti-αIIbβ3 and anti-HLA class I antibodies, during labour- anti-fibrinolytic & R FVIIA used to control PPH and newborn is screened for the disease [6].

Bernard-Soulier syndrome is a defect of the GPIB-IX-V complex, a platelet receptor complex that binds with the Von Willebrand factor (VWF). During pregnancy, in antenatal period- test for HLA type, anti-platelet antibodies, during labour- HLA-matched platelets and tranexamic acid kept ready. RFVII can be used, monitored for 8 weeks postpartum for PPH and newborn is screened for the disease and development of FNAIT [7].

Immune thrombocytopenia is an autoimmune pathology caused by antiplatelet antibodies causing increased destruction and inadequate production of platelets [8]. During pregnancy, in antenatal period-CBC monitoring, if PLT low- prednisone/IVIg, during labour- platelets and tranexamic acid kept ready and newborn has risk of fetal thrombocytopenia and intracranial hemorrhage [9].

Management of Heavy Menstrual bleeding-in a study conducted by Marnach et al, in women treated with IV estrogen for HMB, 72% had controlled bleeding; in women taking oral contraceptive pills (OCPs) 88% had controlled bleeding compared with 76% using medroxyprogesterone acetate. When medical therapies fail for coagulopathies, endometrial ablation or hysterectomy may be warranted after childbearing is completed [10].

Conclusion

AUB C should be considered in women with heavy, prolonged menses from an early reproductive age with history of frequent bruising, epistaxis, gum/dental bleeding, postpartum haemorrhage and severe surgical bleeding and a family history of these issues. Specific diagnostic modalities to be used to arrive at a diagnosis. Blood and blood products should be arranged in obstetric management. Family members should be screened for the disease.

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References

1. Malcolm G Munro, Critchley HOD, Broder MS, Ian Fraser S (2011) FIGO classification system (PALM-COEIN) for causes of abnormal uterine bleeding in non gravid women of reproductive age. Int J Gynaecol Obstet 113: 3-13.
2. Presanna kumari B (2020) Postgraduate Gynecology. https://prithvibooks.com/product/postgraduate-gynecology-by-b-presannakumari/
3. Sabih A, Babiker HM (2023) Von Willebrand Disease. Available at: https://www.ncbi.nlm.nih.gov/books/NBK459222.
4. Castaman G, James PD (2019) Pregnancy and delivery in women with von Willebrand disease. Eur J Haematol 103: 73-79.
5. Krause KA, Graham BC (2023) Glanzmann Thrombasthenia. Available at: https://www.ncbi.nlm.nih.gov/books/NBK538270.
6. Fiore M, Sentilhes L, d'Oiron R (2022) How I manage pregnancy in women with Glanzmann thrombasthenia. Blood 139: 2632-2641.
7. Almomani MH, Mangla A (2024) Bernard-Soulier Syndrome. Available at: https://www.ncbi.nlm.nih.gov/books/NBK557671.
8. Song F, Al-Samkari H (2021) Management of Adult Patients with Immune Thrombocytopenia (ITP): A Review on Current Guidance and Experience from Clinical Practice. J Blood Med 12: 653-664.
9. Stavrou E, McCrae KR (2009) Immune thrombocytopenia in pregnancy. Hematology/Oncology Clinics of North America 23: 1299-1316.
10. Marnach ML, Laughlin-Tommaso SK (2019) Evaluation and management of abnormal uterine bleeding. Mayo Clinic Proceedings. Mayo Clinic 94: 326-335.