

Bleeding Disorders in Obstetrics and Gynaecological Practice

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ABSTRACT

The objective of the study was to determine the frequency, types, presenting symptoms and management options in patients with bleeding disorders in the local obstetric and gynaecological practice. This was a descriptive study of one-year duration conducted at the Pakistan Atomic Energy Commission General Hospital, Islamabad. Types of bleeding disorders in decreasing order of frequency were HELLP syndrome in 27.7% (n=5), gestational thrombocytopenia in 22% (n=4), Von Willebrand disease in 16.66% (n=3), Glanzmann's thrombocytopathia in 11.11% (n=2), autoimmune haemolytic anaemia in 11.11% (n=2), post-transfusion purpura in 6% (n=1) and factor V deficiency in 6% (n=1). HELLP syndrome and gestational thrombocytopenia were the commonest bleeding disorders in pregnant patients and Von Willebrand disease is the commonest bleeding disorder in gynaecological patients with menorrhagia.

Key words: *Bleeding disorders. HELLP syndrome. Thrombocytopenia.*

Bleeding disorders can be inherited and acquired. Inherited disorders improve during pregnancy while acquired disorders tend to worsen and bleeding problems unique to pregnancy may occur.¹ Similarly, incidence of bleeding disorders is higher in patients with menorrhagia than in general population.² In developing countries like ours majority of bleeding disorders remain undiagnosed until the patient presents with massive haemorrhage or undergoes some surgery. The purpose of this study was to evaluate the frequency and type of bleeding disorders in gynaecological practice in Pakistan and also to determine the common presenting symptoms and available management options in the local setup.

This descriptive study was conducted at the department of Obstetric and Gynaecology, PAEC General Hospital Islamabad, from January to December 2008. All the patients reporting to PAEC General Hospital Gynaecology Department were included in study. Patients on Heparin, Aspirin and Warfarin were excluded. Data was retrieved from yearly maintained registers, HMIS (Hospital Management Information System) and patients' history files. All those patients in whom history and clinical examination indicated a bleeding disorder were subjected to screening tests which included platelet count, prothrombin time, activated partial thromboplastin time, bleeding time, clotting time. In case of positive screening test special tests for diagnosis of a specific bleeding disorder were performed. Data was analyzed by descriptive statistics.

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During one year, 3523 patients were admitted in the department. Out of the total patients, 2063 were obstetric and 1460 were gynaecological patients. Eighteen patients (0.5%) had different bleeding disorders. The types of bleeding disorders in decreasing order of frequency were HELLP syndrome (27.7%, n=5), gestational thrombocytopenia (22%, n=4), Von Willebrand disease (16.66%, n=3), Glanzmann's thrombocytopathia (11.11%, n=2), autoimmune haemolytic anaemia (11.11%, n=2), post-transfusion purpura (6%, n=1) and factor V deficiency (6%, n=1). Figure 1 shows the percentage distribution of different bleeding disorders.

Nine patients i.e. 50% patients required haemotherapy in the form of fresh frozen plasma, platelet concentrates, blood and cryoprecipitates. Three patients i.e. 16% required high cost medicines in the form of intravenous immunoglobulins (IVIG), recombinant factor VIIa and intermediate purity factor VIII. Seven patients (38%) required admission in ICU.

Patients with HELLP syndrome presented with raised blood pressure, headache, generalized malaise, vomiting, severe epigastric pain and jaundice. Patients with other disorders presented with menorrhagia, pallor, bruises, bleeding from gums and nose bleed.

Haemolysis, elevated liver enzyme levels and low platelet syndrome occurs in 0.2 - 0.6% of pregnancies.³ If untreated, this syndrome ultimately leads to multiple organ failure. Maternal mortality rate is 1-4% and infant mortality and morbidity rates range from 10 to 60% depending on severity of maternal disease.²

There were 5 patients with HELLP syndrome in one year. All 5 patients survived though 2 patients had peripartum hysterectomy due to uncontrolled bleeding from the placental site. Three babies survived and two were stillborn due to extreme prematurity. The frequency of HELLP syndrome in this study was 0.2% which corresponds with the reported incidence of 0.2 - 0.6%.¹

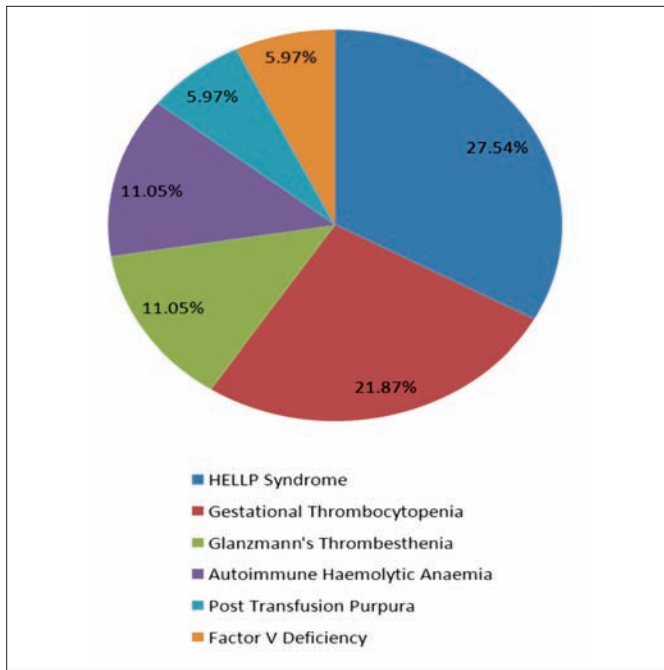


Figure 1: Percentage distribution of bleeding disorders.

Gestational thrombocytopenia was the second most common bleeding disorder in this study 22% (n=4). The reported incidence of this condition is 8% of all pregnancies.⁴ The frequency in this study was 0.1%. This low frequency is probably due to the fact that only those patients were evaluated who had thrombocytopenia less than 100,000/ul.

Von Willebrand disease was the third most common bleeding disorder with a frequency of 0.2% which is comparable with reported incidence of 0.8 - 1.3%.⁵

Post transfusion purpura is a rare disorder that typically occurs 3-12 days after transfusion. Thrombocytopenia is profound, often less than 10,000/ul with substantial risk of death and intracranial haemorrhage. Only 150 - 200 cases are reported in literature.⁴ This patient was 32 weeks pregnant and presented on the 10th post-transfusion day with a platelet count of 14,000/ul only. She responded to high dose steroids and IVIG. There was no mortality.

In conclusion, bleeding disorders are among rare clinical entities. To improve the diagnosis of bleeding disorders gynaecologists should keep a high index of suspicion so that these patients can be timely referred to a tertiary care units. Secondly, all the patients presenting with menorrhagia in adolescence should be screened for bleeding disorders because there is a high incidence of bleeding disorders in these patients.

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