

ORIGINAL ARTICLE

Spectrum of Non-Traumatic Bleeding Complaints among women with Bleeding Disorders

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ABSTRACT

Objective: To study the spectrum of bleeding complaints among women with bleeding disorders.

Methodology: This observational study was done at Dept. of Pathology – Liaquat University Hospital, Hyderabad from January 2019 to July 2019 upon a sample of 121 women, selected via non-probability, consecutive sampling). Women presenting to study setting with complaints of non-traumatic bleeding were included in the study. After taking written informed consent, the data was obtained from patient interviews and laboratory investigations was. The data obtained was analyzed using SPSS v. 21.0.

Results: The mean age of the women was 28.13 years (± 5.21 SD). Among the 121 women studied, 73.55% hailed from urban areas, while 26.45% were from rural residential background. The most common presenting complaint was menorrhagia (30.58%), followed by bruising (17.36%) and epistaxis (15.7%). Among the underlying hemostatic pathologies, VWD was the most common (15.7%), followed by other platelet dysfunctions comprising the second most common finding (6.6%). Mean duration of presence of symptoms was 34 months (± 17 SD).

Conclusion: As per the findings of this study, menorrhagia, occasional bruising and epistaxis are reported to be the most common non-traumatic bleeding complaints among women with bleeding disorders. The presence of these symptoms may serve as potential indicators of the probable presence such as bleeding disorders and help in early referral, timely diagnosis and appropriate treatment.

Keywords: menorrhagia, epistaxis, Hemostatic Dysfunction, Bleeding Disorder, Non traumatic bleeding complaints

INTRODUCTION

Bleeding is a phenomenon encountered often, by women. Bleeding is faced during menstruation, it is also encountered during childbirth or miscarriage. Owing to the constant challenge of bleeding, bleeding disorders are more likely to be identified among women particularly premenopausal and of child rearing age. [1] With menorrhagia being just another gynecological conditions among females during which the probability of identifying a bleeding disorders is exaggerated, other such conditions include endometriosis, hemorrhagic ovarian cysts, hyperplasia, fibroids, and polyps. [2] The literature reported that up to 69% of women among samples of menorrhagia patients have been found negative for any hemostatic abnormalities. [3]

In addition to gynecological complaints, women with bleeding disorders also present with other manifestations, such as bruising, epistaxis, bleeding after injuries and incidental discoveries in circumstantial situations (excessive post-operative bleeding after surgery and post-partum hemorrhages). [4]

There is ample published literature explaining the prevalence of hereditary platelet function disorders and coagulation disorders in the developed world (suggesting Von Willebrand disease to be the commonest underlying culprit), very scarce evidence hails from developing countries [5] and whatever, the little evidence has been established, it primarily focuses upon hemophilia A & B and von Willebrand disease (VWD). [6]

It is interesting to note that the first account of identification of VWD disease manifested as mucocutaneous bleeding including epistaxis, easy bruising, gastrointestinal bleeding, oropharyngeal bleeding, and prolonged bleeding after trauma and surgery. In women with VWD, menorrhagia is the most common symptom. [7, 8] It is also substantially unknown whether different bleeding symptoms may preferentially cluster together with some particular pattern within VWD patients, and whether the presence of some bleeding symptoms may actually predict occurrence of bleeding in circumstantial situations (e.g. surgery). [9]

Research regarding the predictive presentation of hereditary hemostatic disorders showed trauma as the commonest presenting factor, followed by surgery and menorrhagia. [10-11] However, clinical symptomatology is complex phenomenon. A great deal is written about how different bleeding disorders may be identified and treated, however, an aspect that merits just as much attention is the how an recognition of these disorders can be made possible by looking at type of routine bleeding symptoms along gynecologic bleeding among women. [5] Therefore, this study is aimed to find out the common non traumatic bleed complaints among women with bleeding disorders so that early referral, timely diagnosis and appropriate treatment can be made possible.

METHODOLOGY

This observational study was done at Dept. of Pathology – Liaquat University Hospital, Hyderabad from January 2019 to July 2019 upon a sample of 121 women, selected via non-probability, consecutive sampling. Women presenting to study setting with complaints of non-traumatic bleeding were included in the study while those having history of Idiopathic Thrombocytopenic Purpura. Aplastic Anemia and Leukemia were excluded from the study. After taking written informed consent, the data about their biodata, and type of bleeding complaint, type of bleeding disorder was enquired from the patients and hematological investigations (complete blood count, peripheral film, PT, APTT and

bleeding time) were conducted. The data obtained was analyzed using SPSS v. 21.0.

RESULTS

The mean age of the women was 28.13 years (± 5.21 SD). Among the 121 women studied, 73.55% hailed from urban areas, while 26.45% were from rural residential background. The most common presenting complaint was menorrhagia (30.58%), followed by bruising (17.36%) and epistaxis (15.7%). Among the underlying hemostatic pathologies, VWD was the most common (15.7%), followed by other platelet dysfunctions comprising the second most common finding (6.6%). Mean duration of presence of symptoms was 34 months (± 17 SD).

Figure No. 1: Presenting Bleeding Complaints

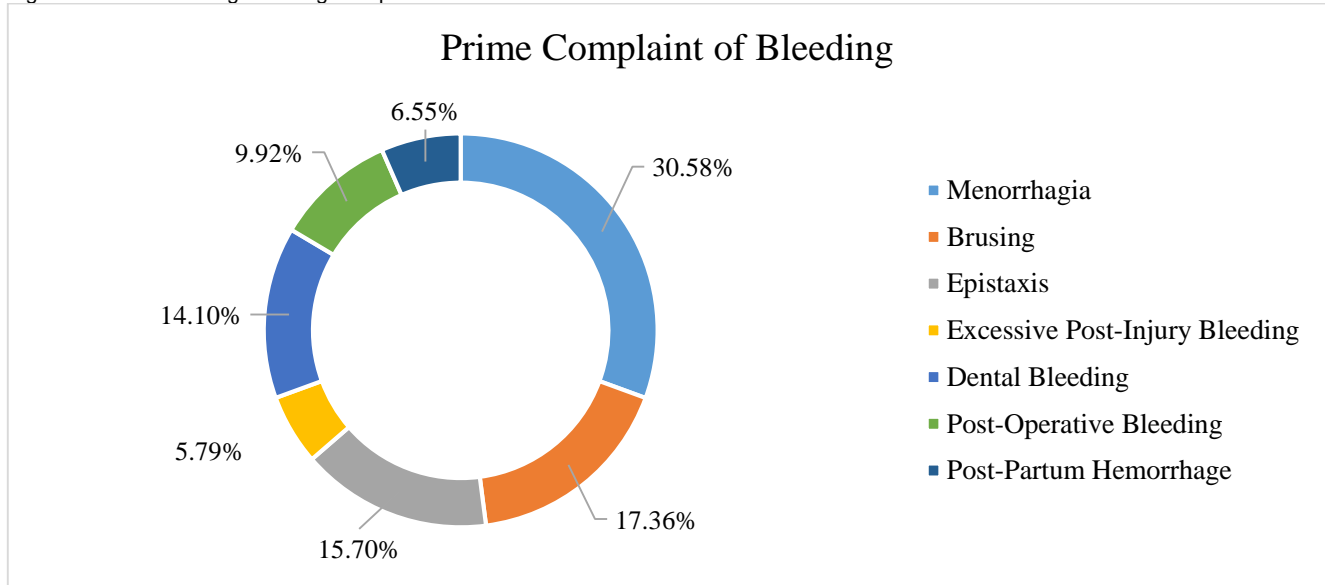


Table No. 1 Presenting Complaint & Underlying Bleeding Disorder.

Prime Bleeding Complaint	Disorder Identified	Disorder Un-Identified
Menorrhagia	12	25
Bruising	05	16
Epistaxis	02	17
Post-Injury Bleeding	05	02
Dental Bleeding	06	13
Post-Operative Bleeding	01	07
Post-Partum Hemorrhage	01	08

Table No. 2: Prime Bleeding Complaint & Type of Underlying Bleeding Disorder

Prime Bleeding Complaint	VWD	Platelet Dysfunction	Factor XI Deficiency	Hemophilia	Rare Factor
Menorrhagia	18	6	2	1	2
Bruising	7	7	1	0	0
Epistaxis	4	7	1	0	0
Post-Injury Bleeding	1	3	0	1	0\
Dental Bleeding	2	3	1	0	0
Post-Operative Bleeding	3	4	0	1	0
Post-Partum Hemorrhage	1	2	0	0	0

DISCUSSION

This study reports menorrhagia as the most common presenting bleeding complaint among women with bleeding disorders, reported by 30.58%. This is line with the other studies which states that around 33% of adolescent girls

admitted in hospitals with menorrhagia later diagnosed with having different bleeding disorders. [13, 14] The other common presentations included followed by bruising i.e. 17.36% and epistaxis (15.7%) and dental bleeding i.e.

14.10% which is supported by the study done by Leewback, in 2016, which states the same presentation. [15]

Among women, presented with bleeding complaints, von Willebrand disease was found to be most prevalent, followed by Platelet Dysfunction and Deficiency of Factor XI, which contrasts with the findings of nationwide study, conducted in United States. [16] It is believed that VWD is under-reported in Pakistan and that the actual prevalence may be much higher [17-18], our study highlighted the higher prevalence of VMD i.e. 15.7%, present in women who presented with bleeding complaint to a tertiary care hospital. This warrants the dire need of further research to find out the actual burden of this life-long illnesses.

Patients with VWD may present at any age because of wide range in severity of symptoms and some patients may have no apparent bleeding history. Ali SS et al, 2016, reported that the VWD commonly presents as a mild to moderate bleeding disorder of platelet dysfunction i.e. bruising, epistaxis, gum bleeding, and menorrhagia [19] which is a similar finding as of ours study. Among rare blood disorders like Glanzmannthrombasthenia, patient primarily presents with history of menorrhagia, a finding similar to that of Borhany M et al, 2018. [20]

This study is among the only few attempts made at identifying the hemostatic profile of symptomatic female patients presenting with bleeding complaints. This research symptomatic correlates that may serve as reliable predictors of underlying bleeding disorder in women presenting with the said complaints, making early identification, diagnosis and eventual timely medical aid more likely. Furthermore, since women of all ages, are enrolled into the study without bias, an interesting display of symptoms of different bleeding disorders across all ages can be seen, which no other research (in our part of the world) offers. There however, is a dearth of published evidence based literature with which this study could be compared and contrasted intensively, thus little is known regarding how this study's results fair against data of the global populace.

CONCLUSION

As per the findings of this study, menorrhagia, occasional bruising and epistaxis are reported to be the most common non-traumatic bleeding complaints among women with bleeding disorders. The presence of these symptoms may serve as potential indicators of the probable presence such as bleeding disorders and help in early referral, timely diagnosis and appropriate treatment.

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