

# Prevalence of Menorrhagia in Young Females

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## ABSTRACT

**Objective:** To Study the Prevalence of Menorrhagia in young Females

**Study Design:** Retrospective study

**Place and Duration of Study:** This study was conducted at the Imran Idris Teaching Hospital Sialkot and Shahina Jamil Teaching Hospital Abbottabad during Jan 2018 to Feb 2020.

**Materials and Methods:** Four Hundred patients of Menorrhagia in young female were included in the study. Fifty percent patients were taken from Imran Idris Teaching Hospital Sialkot and 50% patients were taken from Shahina Jamil Teaching Hospital Abbottabad. The history, examination and investigations were recorded on designed Performa. The written informed consent was taken before recording the data. The permission of Ethical Committee was taken before collecting the data and Get Publishing in Medical Journal. The data was analyzed for results by SPSS version 10.

**Results:** The mean age was  $19.98 \pm 13$ , adolescents/a adult patients (ratio) was 2:1, patients with mucosal bleeding other than menorrhagia was 17(21.91%), Patients with menorrhagia since menarche (%) was 6 (63.88%), patients having history of treatment for Menorrhagia 49 (66.46%), patients with PBAC score of >100 (%) was 65 (88%), patients with secondary Amenorrhea 17(7.84%), Mean hemoglobin 102.67:26.4, Mean platelet count (4109/l) was 2121,88221.013.519, Mean prothrombin time was 12.99:1.26, Mean activated partial thromboplastin time (s) was 28.88±4.81, Mean thrombin time (s) was 15.97:1.26, Mean fibrinogen (g/dt.) was 3.45±1.02, Mean serum rennin (ng/mL) was 14.88:26.87.

The bleeding history and characteristics of the patients with congenital clotting defects was evident.

The p value was significant between Patients with bleeding disorders and Patients without bleeding disorders in case of Nose bleeding and Easy bruising  $p < 0.001$  and comparison was non-significant in rest of the case.

**Conclusion:** It was concluded from the study that now a days it was common problem that young ladies have complaint of Menorrhagia.

**Key Words:** Prevalence, Menorrhagia, Young Females

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## INTRODUCTION

Excessive bleeding per month is defined as a blood loss during menstruation of more than eighty ml during menstrual cycle. Its estimated prevalence in healthy women is 9%-14%<sup>[1]</sup>. A variety of organic, endocrine, gynecologic, or other systemic causes may be responsible for menorrhagia<sup>[2]</sup>. Relating to the menses issue are likely to be of poorer quality in female with bleeding problems, as they are more likely to have more

and painful relating to the menses interval and release of an egg from one of a woman's ovaries bleeding and pain<sup>[3,4]</sup>. Due to abnormal high bleeding during menstrual cycle hemoglobin level decreases and weakness develops. In different printed series, thirty two percent-hundred percent of females with is a blood disorder in which the blood does not clot (VWD), the most common genetically bleeding issue, were coated to have heavy relating to the menses bleeding. Heavy relating to the menses bleedings were coated between ten percent-seventy percent of females with other bleeding issues<sup>[5]</sup>. Underlying bleeding issues were generally not noticed due to the state of being unable to be used of detailed changing to a solid or semi-solid state in normal laboratory procedures and lack of the branch of medicine involving study and treatment of the blood consultation. The target of this work was the testing of bleeding issues in before puberty and young female presenting with Menorrhagia.

## MATERIALS AND METHODS

Four Hundred patients of Menorrhagia in young female were included in the study. Fifty percent patients were

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taken from Imran Idris Teaching Hospital Sialkot and 50% patients were taken from Shahina Jamil Teaching Hospital Abbottabad. The history, examination and investigations were recorded on designed Performa. The written informed consent was taken before recording the data. The permission of Ethical Committee was taken before collecting the data and Get Publishing in Medical Journal. The data was analyzed for results by SPSS version 10.

## RESULTS

The mean age was  $19.98 \pm 13$ , adolescents/a adult patients (ratio) was 2:1, patients with mucosal bleeding other than menorrhagia was 17(21.91%), Patients with menorrhagia since menarche (%) was 6 (63.88%), patients having history of treatment for Menorrhagia 49 (66.46%), patients with PBAC score of  $>100$  (%) was 65 (88%), patients with sescrelv Alf 101 quAli tv C0)1"4 (%) was 17(7.84%), Mean hemoglobin 102.67:26.4, Mean platelet count (.4109/1) was 2121,88221.013.519, Mean prothrombin time was 12.99:1.26, Mean activated partial thromboplastin time (5) was  $28.88 \pm 4.81$ , Mean thrombin time (s) was 15.97:1.26, Mean fibrinogen (g/dt.) was  $3.45 \pm 1.02$ , Mean serum rennin (ng/mL) was 14,88:26,87 as shown in table no 1.

**Table No.1: Comparison of the patients with and without bleeding disorders (n = 400)**

Sr No	Characteristics	Numbers or values	
1	Mean age. years (min-max)	19.98:L0,13 (10-48)	
2	adolescents/a adult patients (ratio)	49/25(2:1)	
3	R patients with mucosal bleeding other than menorrhagia (%)	17 (21.91)	
4	Patients with menorrhagia since menarche (%)	+6 (63.88)	
5	a. patients having history of treatment for menorrhagia	49 (66.46)	
6	if patients with PBAC score of $>100$ (%)	65 (88)	
7	et patients with sescrelv Alf10	17(7.84)	
8	Mean hemoglobin (WO	102.67:26.4	(RV** 120.140)
9	Mean platelet count (.4109/1)	2121,88221 .013.519	(RV:150-400x109/1..)
10	Mean prothrombin time (s)	12.99:1.26	(11/.11.5-155)
11	Mean activated partial thromboplastin time (5)	28.88 $\pm$ 4.81	(11V.26.5-40)
12	Mean thrombin time (s)	15.97:1.26	(W.14-21)
13	Mean fibrinogen (g/dt.)	3.45 $\pm$ 1.02	(RV. 2.4)
14	Mean serum rennin (ng/mL)	14,88:26,87	(RV212)

**Table No 2: Bleeding history and laboratory characteristics of the patients with congenital clotting defects**

Sr	age	lgc	T	Epistaxis	Area bruising	Bleeding gums	Stagery bleeding	Minn bleeding	1lb gl	PII.10' I	Pailudogs in Aggregation test
1	16	16	GT	Tart	yes	ys	No	No	278	77.91	DO cunt with ADP. collagen epinephrine
2	14	14	GT	No	5t <sup>5</sup>	Rs	No	No	78	207	no cunt with ADP colbtem epinephrine
3	14	14	BSS			No	Tooth ex-maim s5ts	No	91	69.98	norm< with nstocetin
4	14	14	85.5	yon	ya	Rs	Tooth ex-traction	Nn/to	6	17.98	no cunt with lift000DI
5	14	14	BSS			No	Yes No	No	75	49.77	nccuntwuh INO(d111
6	14	14	LOW VWF	Rs	Yes	Yes	No Tooth ex-traction	wino	13	259	normal tunes
7	24	24	VND 61 <sup>83</sup>	its	Yes	No	Yes No	No	81	390	no am with thtocoïn
8	33	33	%MD?		yes	no	No	No	13	158	no cunt fl ristontin
9	21	21	LOW VWF	Do	pp <sup>8</sup>		Ito/no	No	144	254	normal curves
10	12	12	FV11 del	5t <sup>5</sup>	no	no	Nos	No	51	241	ND

The bleeding history and characteristics of the patients with congenital clotting defects was evident as shown in table no 2.

The p value was significant between Patients with bleeding disorders and Patients without bleeding disorders in case of Nose bleeding and Easy bruising  $p < 0.001$  and comparison was non-significant in rest of the case as shown in table no 3.

The prevalence of Menorrhagia in female was maximum 227(56.75%) in age group 16-20years and was minimum 50 (12.5%) at age group 21-25years as shown in table no 4.

**Table No 3: Comparison of the patients with and without bleeding disorders (n = 400)**

Sr #		Patients with bleeding disorders	Patients without bleeding disorders	P
1	Nose bleeding: ratio (%)	18/24 (75%)	12/96 (12.5%)	0.00
2	Easy bruising: ratio (%)	20/24 (83.3%)	18/96 (18.7%)	0.00
3	Gingival leeding: ratio (%)	10/24 (41.6%)	10/96 (10.4%)	0.02
4	Postoperative bleeding: ratio (%)	6/6 (100%)	14/36 (38.8%)	0.09
5	Postpartum bleeding:ratio (%)	2/2 (100%)	2/26 (23%)	0.36
6	High PBAC score: ratio (%)	24/24 (100%)	88/96 (91%)	0.57
7	Anemia: ratio (%)	18/24 (75%)	46/96 (72.9%)	0.09
8	Severe anemia (HB<7g/dl): ratio (%)	6/24 (25%)	12/96 (12.5%)	0.06
9	Mean HB (g/dl)	9.11 ± 3.35	10.69 ± 2.44	0.33
10	Low ferritin: ratio (%)	12/12 (100%)	42/76 (55.26%)	0.03
11	Ovulation pain: ratio (%)	8/22 (36.36%)	30/94 (31.9%)	1.00
12	Menorrhagia at menarche: ratio (%)	20/24 (83.33%)	64/96 (66.66%)	0.3
13	Poor quality of life (points > 35): ratio (%)	16/24 (66.6%)	66/96 (68.75%)	1.0
14	Prolonged closure time (PFA-100 collagen epinephrine): ratio (%)	8/10 (80%)	20/90 (22.22%)	0.01
15	Prolonged closure time (PFA-100 collagen-ADP): ratio (%)	4/8 (50%)	2/90 (2.2%)	0.01
16	Parental consanguinity: ratio (%)	10/20 (50%)	14/96 (14.58%)	0.18
17	Familial bleeding history: ratio (%)	12/20 (60%)	38/96 (39.58%)	0.4

**Table No. 4: Age distribution in female of Menorrhagia**

Sr #	Age (years)	Number of cases	Percentage %
1	12-15	123	30.75%
2	16-20	227	56.75%
3	21-25	50	12.5%
Total		400	100%

## DISCUSSION

At least five percent-ten percent of females of generative age will take medical attention for abnormally heavy bleeding at menstruation [8], however, an underlying cause is known in only fifty percent of cases [2]. The most common related to endocrine etiology of heavy related to menses bleeding in before puberty girls is without ovulation not operating normally uterine bleeding owing to the immaturity of the hypothalamic-pituitary-ovarian axis [9]. In the present work, in nearly half of the teenagers, abnormally heavy bleeding at menstruation subsided suddenly, usually with maturation of this axis, and no bleeding issue could be detected.

In a present work from Sweden including one hundred fifty two females with unknown cause abnormally heavy bleeding at menstruation and fifty six healthy, regularly menstruating females, a strong association was found between unknown cause abnormally heavy bleeding at menstruation and family history of heavy menstrual bleeding ( $r=0.68$ ). The authors directed that familial abnormally heavy bleeding at menstruation must be due to a familial trait [10]. In the present work, thirty nine point five eight percent of the sick persons without bleeding issues had a family history of abnormally heavy bleeding at menstruation.

In this single center study, a bleeding disorder Von Willebrand disease (VWD), other platelet function defects, or ITP) was identified in 20% of the patients, similar to the findings of James' study [11]. [12]. In these works, testing for other bleeding issues of this population was not extensive, and only one study involved tests of platelet function beyond performance of a bleeding time test [13]. In a study performed in 6 centers in the United States, among 232 women with Policy Based Access Control scores of >100, a laboratory abnormality was found in 73.3%, including both white (68.1%) and black (91.9%) subjects; 6.0% had Von Willebrand disease, 56.0% had abnormal platelet aggregation tests, 4.7% had a non- Von Willebrand disease coagulation defect, and 6.5% had an abnormal PFA only. Platelet aggregation was reduced in fifty eight point nine percent of the patients, with multiple agonists in twenty eight point six percent, a single agonist in six point one percent, and ristocetin alone in four point two percent. Laboratory abnormal values of the stopping of a flow of blood, especially platelet function faults, were common, but the clinical significance of these abnormal values was not clear. This work also conceal rare coagulation deficiency and compared factor levels of the sick persons with those of the control subjects. Twenty-three subjects had non-Von Willebrand disease coagulation defects (deficiencies of factors II, V, VII, XI, and XIII and fibrinogen, plasminogen activator inhibitor-1, and alpha-2-antiplasmin). Levels of these factors were

above fifty IU/dL but slightly below the reference range, which may have limited the clinical significance [14,15,16]. We did not determine rare factor deficiencies routinely but assessed the FVII level as 20 IU/dL in a sick person with increased PT. According to some instructions, routinely, initial tests for bleeding issues should rule out more common causes of bleeding. These tests add whole blood counts, aPTT, PT, and possibly fibrinogen level or thrombin time. Patients with isolated prolonged PTT or with normal PTT, PT, platelet count, and fibrinogen level in the presence of bleeding signs or symptoms should receive Von Willebrand disease (VWF):Ag, VWF:RCO, and factor VIII assays to test for Von Willebrand disease [7,17].

## CONCLUSION

It was concluded from the study that now a days it was common problem that young ladies have complaint of Menorrhagia.

### Author's Contribution:

Concept & Design of Study: Sadaf Siddique  
 Drafting: Qamoos Razaaq, Faryal Azhar  
 Data Analysis: Asra Tariq, Umra Imran, Anum Imran  
 Revisiting Critically: Sadaf Siddique, Qamoos Razaaq  
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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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