



Clinical study on Siddha Medicine “Kadukkai Chooranam” in the management of Menorrhagia.

*Mohanapriya M¹, Kanakavalli KJ², Parthibhan P³

¹ PG Alumna, Department of Maruthuvam, Government Siddha Medical College, Chennai. ² Director General, Central Council for Research in Siddha, Chennai, ³ Joint Director, Directorate of Indian Medicine & Homeopathy, Chennai.

ABSTRACT

Uterine related disorders or menstrual associated disorder are common in one in ten women who are in their reproductive age. Menorrhagia is one of the most common and significant gynaecological problems and is seen in about 10-15% of women. Menorrhagia is a major clinical symptom in gynaecological diseases that affect 1 in 5 women worldwide. World Health Organization (WHO) identified the prevalence of three-month severe bleeding as 8–27% of women. Siddha is one of the ancient systems of medicine known to mankind. The siddhar *Yuguni*, well known as Father of *Siddha pharmacology* classified 4448 diseases in his literature *Yugi vaithiya chinthaamani* and as per the literature the clinical features of *Pitha Perumbadu* was found to be similar to that of Dysfunctional Uterine Bleeding. Through siddha, the Kadukkai chooranam were used to treat gynaecological diseases. Clinical study conducted among 20 females visited our hospital. The parameters like haemoglobin, bleeding time, clotting time, and pad usage were noted before and after the treatment. Along with associated symptoms like excessive bleeding, prolonged menstrual bleeding, intermittent blood clot, tiredness, headache, lower abdominal pain, giddiness and low back ache noted before and after the treatment. The study shows significant therapeutic efficacy and the scientifically the bleeding time, clotting time, and pad usage reduction and increase of haemoglobin etc.

Keywords:

Menorrhagia, Dysfunctional uterine bleeding, menstrual bleeding.

Address for correspondence:

Mohanapriya M
PG Alumna

CODEN : IJRPHR

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: publisher@ijrphr.com

To access this article online

Website : <http://www.ijrphr.com/>

DOI : 10.121/ijrphr/03.0304.502

Quick response code



INTRODUCTION

Abnormal Heavy or irregular menstrual bleeding without an notable lesion is mainly due to an imbalance of the various hormones which have a regulatory effect on the menstrual cycle.(1) Another cause of heavy menstrual bleeding with no pelvic pathology is the presence of an acquired or inherited bleeding disorder.(2) The haemostatic system has a central role in controlling the amount and the duration of menstrual bleeding, thus abnormally prolonged or profuse bleeding does occur in most women(3) affected by bleeding disorders. Whereas irregular, pre-menarche or post-menopausal uterine bleeding is unusual in inherited or acquired haemorrhagic disorders, severe acute bleeding and heavy menstrual bleeding at menarche and chronic heavy menstrual bleeding during the entire reproductive life are common.(4)

Uterine related disorders or menstrual associated disorder are common in one in ten women who are in their reproductive age. Menorrhagia is one of the most common and significant gynaecological problems and is seen in about 10-15% of women.(5) It strikes at the core of a women's psyche affecting her physical, mental and spiritual health. A woman feels hard to talk about her problems and experience, unless they are fellow sufferers.

Menorrhagia is a major cause of gynaecological diseases that affect 1 in 5 women worldwide of their reproductive age; 9-14% of women in their reproductive age lose 80 mL blood in each cycle.(6) This proportion shows similar frequency in developing countries as well. In a study conducted among the women of rural India, 60.6% were having menstrual disorders as one of the common gynaecological diseases. In a multi-centric country study, World Health Organization (WHO) identified the prevalence of three-month severe bleeding as 8-27% of women.(7)

The characteristics of menorrhagia are excessive flow at the time of an expected period, blood loss of 80ml or more since upper limit of normal menstruation is taken as 80 ml per menses, abnormality in bleeding which denotes the present of intermittent shedding of blood clots. Menorrhagia is one of the commonest causes of Iron deficiency Anaemia. In which 9-14% of women lose more than 80ml per period and 60% of these women are actually anaemic.(8) In between menarche and menopause, roughly 400-500cycles occur in an average female menstruation. The factors like, interval or cycle length, the duration of flow and the amount of blood loss are major

characteristics in this case. Duration of flow and amount of blood loss are causes for concern in menorrhagia.(9)

The aetiology is purely hormonal and the hypertrophy and hyperplasia of the endometrium are induced by a high titre of oestrogen in the circulating blood.(6) Progesterone is responsible for secretion of PGF2 alpha in anovulatory cycles; absence of progesterone causes absence or low level of PGF2 alpha and can cause menorrhagia. Tissue plasminogen activator (TPA), a fibrinolytic enzyme is increased and this increased fibrinolysis causes menorrhagia.

Aim of this study

The Aim of this study is to evaluate the effectiveness of Siddha medicine in the management of Menorrhagia

Methodology

Study Design

The study was approved by the Ethical committee of GSMC, Chennai and registered in Clinical trials registry of india (Trial REF/2016/06/011550). It is a descriptive, open clinical study conducted among 20 females visited hospital of Government Siddha medical college, Chennai.

Selection of cases

20 female cases were selected who are in reproductive age group [18 to 45years] were taken from Hospital. Before selecting all the cases were carefully examined for proper diagnosis and comorbid, systemic illness were ruled out. All the cases were included based on inclusion and exclusion criteria. All the necessary investigations and follow-up were done properly with intervals.

Follow-up

The patients were followed for the treatment up to 2-3 consecutive menstrual cycles.

Inclusion and Exclusion criteria

The female subjects having excessive menstrual bleeding, with regular menstrual cycles (regular shedding), Prolonged duration, Presence of blood clots, and anaemia were included for the study. The female subjects having age group-less than 18yrs and more than 45yrs, bleeding disorders, malignancies like carcinoma of cervix, vagina and uterus, intrauterine contraceptive devices [IUCD] users were excluded from the study.

Therapeutic Medicine

Fruit rind of 100 (Kadukkai) Terminalia chebula is grinded using fresh leaf juice of (Adathodai) Justicia adathoda and dried well. This procedure is repeated for 14 times. Adult human dose is 1gm thrice a day with honey from the first day of menstrual cycle upto bleeding stops with a regular review for each 7 days.

Evaluation of Clinical Parameters

A detailed history of patient's history, complaints, signs and symptoms, Number of pads, haematological observations, treatment response, bleeding and clotting times were noted. History of any past illness, personal history, menstrual and obstetric history are noted.

Statistical analysis

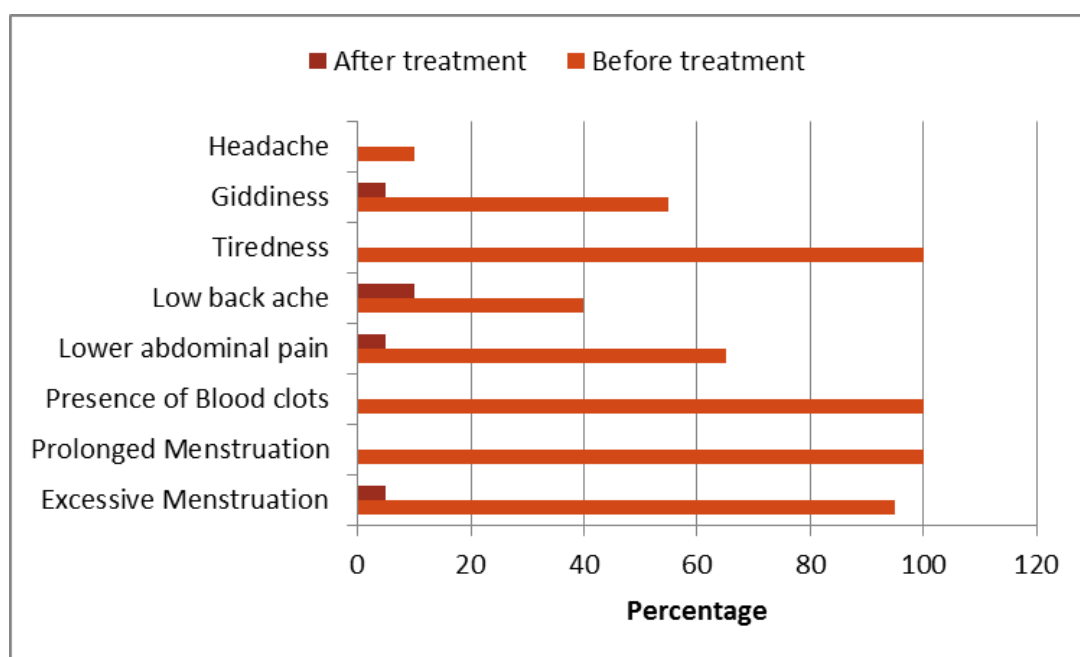
We analysed the data obtained from the study using Microsoft excel 2007 and evaluated them through frequency and percentage.

RESULTS

Table 1. Signs and Symptoms of selected subjects

SIGNS AND SYMPTOMS	BEFORE TREATMENT		AFTER TREATMENT	
	NO.OF CASES	PERCENTAGE	NO.OF CASES	PERCENTAGE
EXCESSIVE MENSTRUATION	20	100%	1	5%
PROLONGED MENSTRUATION	20	100%	0	0%
PRESENCE OF BLOOD CLOTS	20	100%	0	0%
LOWER ABDOMINAL PAIN	13	65%	1	5%
LOW BACK ACHE	8	40%	2	10%
TIREDNES	20	100%	0	0%
GIDDINESS	11	55%	1	5%
HEAD ACHE	2	10%	0	0%

Figure. 1 Signs and symptoms during treatment



In this study, Before the treatment the bleeding nature was excessive and after treatment it was drawn from 100% to 5%, prolonged menstrual bleeding drawn from 100% and presence of blood clots from 100% drawn from 100% and tiredness from

100% and head ache from 10% were drawn to 0%, lower abdominal pain from 65% and giddiness from 55% were drawn to 5%, low back ache from 40% drawn to 10%.

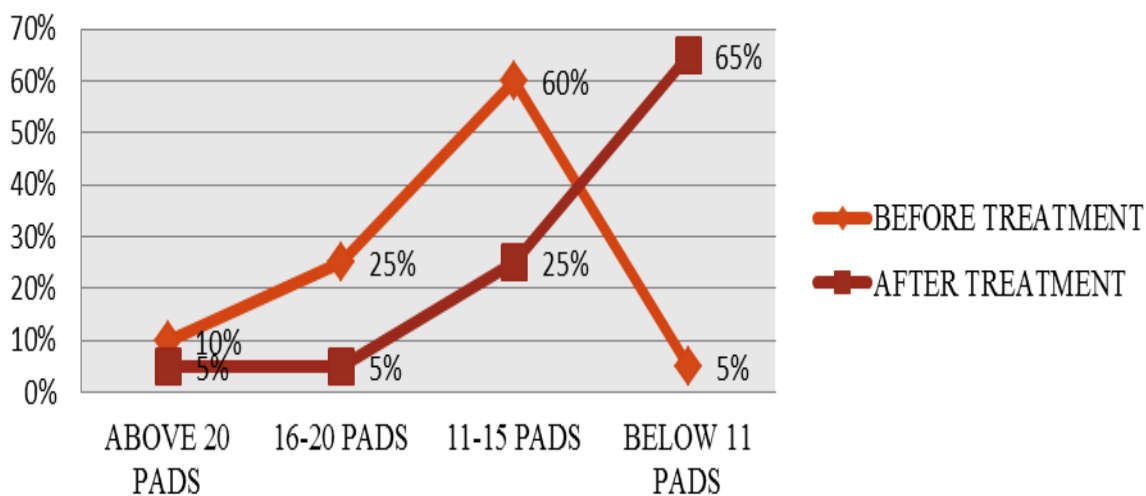
Table 2. No. of Pad usage before treatment

NO.OF PADS/3 DAYS	NO.OF CASES/20	PERCENTAGE
ABOVE 20 PADS	2	10%
16-20 PADS	5	25%
11-15 PADS	12	60%
BELOW 11 PADS	1	5%

Table 3. No. of Pad usage after treatment

NO.OF PADS/3 DAYS	NO.OF CASES/20	PERCENTAGE
ABOVE 20 PADS	1	5%
16-20 PADS	1	5%
11-15 PADS	5	25%
BELOW 11 PADS	13	65%

Figure 2. Number of Pads Before and After Treatment



Before treatment, 10% female used more than 20 pads and after the treatment it was reduced to 5%. The patients using 16-20 pads were drawn from 25% to 5%, patients using 11-15 pads were drawn from 60% to 25% and patients using below 11 pads

were increased from 5% to 65%. It is an remarkable change to be note that, more than 65% of patients using pads less than 11 which was considered as outcome of this treatment.

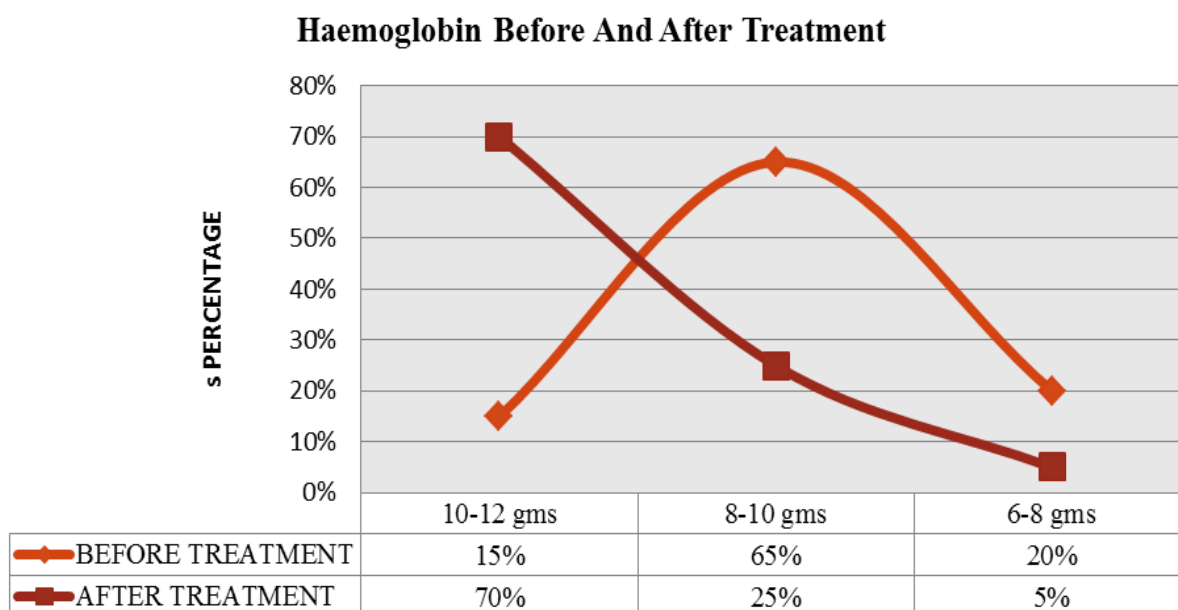
Table 4. Haematological observation before treatment

HAEMOGLOBIN LEVEL	NO.OF CASES/20	PERCENTAGE
10-12 gms	3	15%
8-10 gms	13	65%
6-8 gms	4	20%

Table 5. Haematological observation after treatment

HAEMOGLOBIN LEVEL	NO.OF CASES/20	PERCENTAGE
10-12 gms	14	70%
8-10 gms	5	25%
6-8 gms	1	5%

Figure 3. Haemoglobin percentage before and after treatment

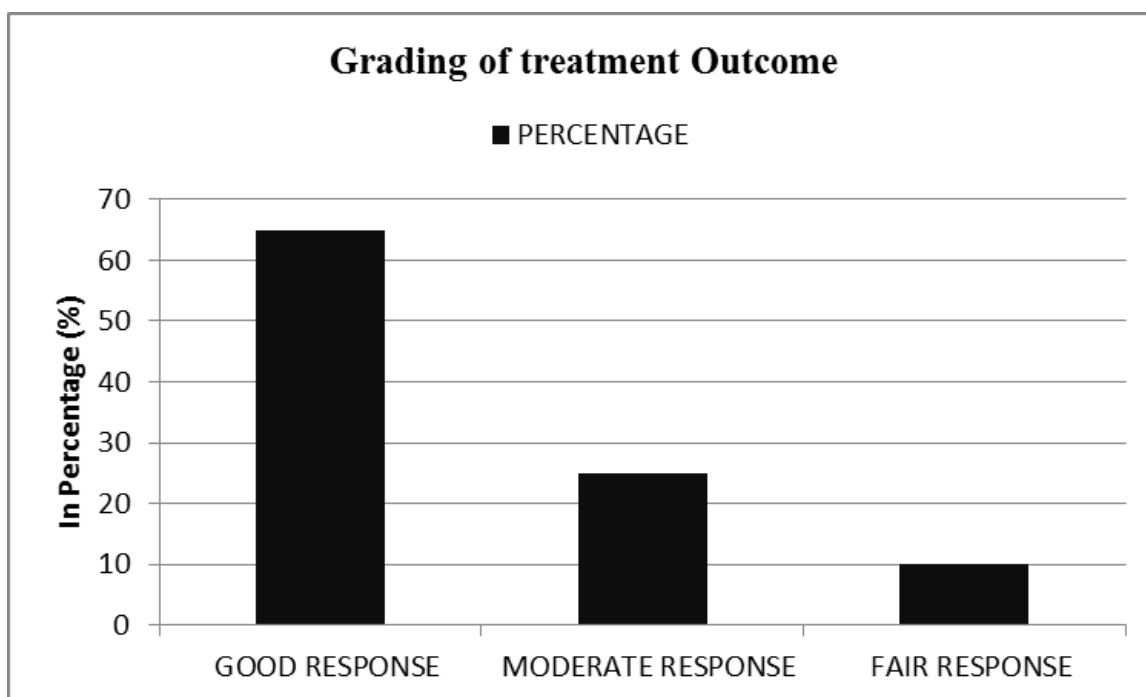


After treatment 6-8 gms of Hb level were noticed in 5% of patients, 8-10gms of Hb were noticed in 25% of the patients and 10-12 gms of Hb level were noticed in 70% of the patients. Linearity line in after treatment, show gradual incline from low to high level.

Table 6. Gradation of Treatment Outcome

GRADE OF RESULTS	NO.OF CASES/20	PERCENTAGE
GOOD RESPONSE	13	65%
MODERATE RE- SPONSE	5	25%
FAIR RESPONSE	2	10%

Figure 4. Grading of treatment outcome



Good response of treatment was about 65% and moderate response of treatment was about 25% and fair response was in 10% of the patients. Overall this study shows good outcome with this. Numbers of pads used by the patients were gradually reduced after the treatment. Bleeding time and clotting time were gradually reduced after the treatment.

Table 8. Haemoglobin level before and after level

OP.NO	NAME OF THE PATIENTS	HAEMOGLOBIN LEVEL IN GMS/100ML OF BLOOD	
		BT	AT
7672	Mrs. Jayanthi	8.0	9.2
7636	Ms. Vinothini	6.4	8.4
7167	Ms. Benazir	8.2	9.6
8425	Mrs. Sentamil	9.0	10.2
9489	Mrs. Kalaiselvi	9.6	10.5
678	Mrs. Yasmin	10.0	10.8
823	Mrs. Sundari	9.2	10.5
949	Mrs. Renuka	9.8	10.5
7737	Mrs. Baskamalar	7.0	7.9
9557	Mrs. Valarmathy	10.8	11.4
1570	Mrs. Logeshwari	9.4	10.6
1712	Ms. Suganya	9.8	10.5
8429	Ms. Archana	9.4	10.2
1620	Mrs. Bharathi	9.2	10.2
4021	Mrs. Meenakshi	10.6	11.2
3162	Mrs. Sumathi	8.0	9.4
5057	Mrs. Jeyanthi	9.0	10.1
5186	Mrs Mala.	9.8	10.5
3116	Mrs. Kala	8.4	9.2
7531	Mrs. Uma maheshwari	8.6	10.4

CONCLUSION

The Kadukkai Chooranam poses good styptic activity in terms of reducing bleeding and clotting time. The menstrual bleeding was gradually reduced and the symptoms like excessive bleeding, prolonged menstrual bleeding, intermittent blood clot, tiredness, headache, lower abdominal pain, giddiness and low back ache reduced drastically. After the treatment, the pad usage more than 20 has reduced upto 11 pads. Associatively haemoglobin level was raised more than 11gm/dl. Overall, this study shows good and significant therapeutic efficacy with this drug.

Table. 9 Bleeding and clotting time of patients

OP.NO	NAME OF THE PATIENTS	BLEEDING TIME		CLOTTING TIME	
		min' sec"		min' sec"	
		BT	AT	BT	AT
7672	Mrs. Jayanthi	2'54"	2'20"	4'48"	5'12"
7636	Ms. Vinothini	2'10"	2'22"	4'49"	4'14"
7167	Ms. Benazir	3'10"	2'54"	4'55"	4'17"
8425	Mrs. Sentamil	2'12"	2'10"	6'42"	5'40"
9489	Mrs. Kalaiselvi	3'27"	2'44"	6'02"	6'41"
678	Mrs. Yasmin	2'36"	4'10"	4'52"	5'25"
823	Mrs. Sundari	3'27"	2'10"	5'24"	4'18"
949	Mrs. Renuka	2'10"	3'10"	5'44"	5'10"
7737	Mrs. Baskamalar	3'08"	2'58"	6'34"	6'02"
9557	Mrs. Valarmathy	2'42"	2'40"	5'38"	4'51"
1570	Mrs. Logeshwari	1'48"	2'18'	5'22"	5'32"
1712	Ms. Suganya	2'40"	2'08"	4'36"	3'50"
8429	Ms. Archana	3'36"	2'10"	5'44"	5'10"
1620	Mrs. Bharathi	2'10"	1'54"	3'55"	3'10"
4021	Mrs. Meenakshi	2'54"	2'06"	3'24"	3'20'
3162	Mrs. Sumathi	2'10"	1'46"	5'10"	4'51"
5057	Mrs. Jeyanthi	3'09"	2'04"	5'48"	5'16"
5186	Mrs Mala.	2'24"	2'02"	5'40"	4'39"
3116	Mrs. Kala	2'54"	1'59"	6'24"	5'15"
7531	Mrs. Uma maheshwari	2'55"	2'02"	6'10'	5'39'

CONFLICT OF INTEREST: None declared

SOURCE OF FUNDING: Nil

REFERENCES

- Graham R-A, Davis JA, Corrales-Medina FF. The Adolescent with Menorrhagia: Diagnostic Approach to a Suspected Bleeding Disorder. *Pediatr Rev.* 2018 Dec;39(12):588–600.
- Wilkinson JP, Kadir RA. Management of abnormal uterine bleeding in adolescents. *J Pediatr Adolesc Gynecol.* 2010 Dec;23(6 Suppl):S22-30.
- Byams VR, Anderson BL, Grant AM, Atrash H, Schulkin J. Evaluation of bleeding disorders in women with menorrhagia: a survey of obstetrician-gynecologists. *Am J Obstet Gynecol.* 2012 Oct;207(4):269.e1-5.
- James AH. Bleeding disorders in adolescents. *Obstet Gynecol Clin North Am.* 2009 Mar;36(1):153–62.
- Lee JY, Lee D-Y, Song JY, Lee ES, Jeong K, Choi D. A national survey of gynecologists on current practice patterns for management of abnormal uterine bleeding in South Korea. *Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet.* 2015 Oct;131(1):74–7.

6. Graham R-A, Davis JA, Corrales-Medina FF. The Adolescent with Menorrhagia: Diagnostic Approach to a Suspected Bleeding Disorder. *Pediatr Rev.* 2018 Dec;39(12):588–600.
7. Wilkinson JP, Kadir RA. Management of abnormal uterine bleeding in adolescents. *J Pediatr Adolesc Gynecol.* 2010 Dec;23(6 Suppl):S22-30.
8. Byams VR, Anderson BL, Grant AM, Atrash H, Schulkin J. Evaluation of bleeding disorders in women with menorrhagia: a survey of obstetrician-gynecologists. *Am J Obstet Gynecol.* 2012 Oct;207(4):269.e1-5.
9. James AH. Bleeding disorders in adolescents. *Obstet Gynecol Clin North Am.* 2009 Mar;36(1):153–62.
10. Lee JY, Lee D-Y, Song JY, Lee ES, Jeong K, Choi D. A national survey of gynecologists on current practice patterns for management of abnormal uterine bleeding in South Korea. *Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet.* 2015 Oct;131(1):74–7.
11. 6. Mullins TLK, Miller RJ, Mullins ES. Evaluation and Management of Adolescents with Abnormal Uterine Bleeding. *Pediatr Ann.* 2015 Sep;44(9):e218-222.
12. 7. Borzutzky C, Jaffray J. Diagnosis and Management of Heavy Menstrual Bleeding and Bleeding Disorders in Adolescents. *JAMA Pediatr.* 2020 Feb 1;174(2):186–94.
13. 8. James AH, Kouides PA, Abdul-Kadir R, Edlund M, Federici AB, Halimeh S, et al. Von Willebrand disease and other bleeding disorders in women: consensus on diagnosis and management from an international expert panel. *Am J Obstet Gynecol.* 2009 Jul;201(1):12.e1-8.
14. 9. Sidi Y, Douer D, Krugliac J, Pinkhas J. Platelet aggregation and adhesiveness in severe iron deficiency due to menorrhage. *New Istanbul Contrib Clin Sci.* 1978 Mar;12(2):161–5.