

A clinical study about the gynaecological problems among adolescent girls

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Abstract

Objectives: A clinical study about the gynaecological problems among adolescent girls. **Methods:** It was Prospective study. Total 148 adolescent girls were included aged between 13 – 18 years they were attending gynae OPD and IPD of ANMCH Gaya, Bihar, during the period of December 2018 to May 2019. A detailed history and physical examination and Investigation like hormonal assay, CBC, Coagulation profile, and ultra sonography were also done. **Results:** Menstrual disorder was commonest gynecological problems. These include primary amenorrhea, dysmenorrhoea, irregular menses. 31 (20.94 %) had amenorrhea, 16 (10.8 %) girls had dysmenorrhoea; 54 (36.5 %) girls had irregular menses, Vaginal discharge was seen in 27 (18.2 %) girls, Labia majora abscess was seen only 02 cases (1.4%) while septic abortion and UTI was found in 04 (2.7 %) and 14(9.05%) respectively of adolescent girls. **Conclusion:** Awareness and greater attention should be given to protect and promote the health of teenagers.

Key Word: Menstrual disorder, hyperprolactinemia, hypothyroidism, Endocrinal abnormality, Oligomenorrhoea, etc.

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INTRODUCTION

The word adolescent is derived from the Latin word *adolescere*, which means to grow in to maturity. WHO defines Adolescents as individuals in the 10-19 year age group. Adolescents belonging to the age group 10-19 year constitute almost one-fifth of the world's total population.¹ Adolescents constitute over 21.4 % of the population in India ². Adolescents have the lowest mortality among the different age groups and have therefore received low priority. Nutritional deprivation, increased demand of adolescent's body, and excessive menstrual loss, all aggravate and exacerbate anemia and its effects. Menstrual disturbances are not uncommon and

may add further disruption during this difficult phase for adolescents and their families. Girls experience menarche at different ages. The timing of menarche is influenced by female biology, as well as genetic and environmental factors, especially nutritional factors. The mean age of menarche has declined over the last century, but the magnitude of the decline and the factors responsible remain subjects of contention. The worldwide average age of menarche is very difficult to estimate accurately, and it varies significantly by geographical region, race, ethnicity and other characteristics. Various estimates have placed it at 13.³ The mean age of menarche is between 12 and 13 years ⁴⁻⁶. Menstrual bleeding lasts 2–7 days in 80–90 % of adolescent girls. Most cycles still range from 21 to 45 days which, even in the first year after menarche, is normal. Changing 3–6 pads per day without soiling from oversaturated pads suggest a normal flow ⁴. Hyperandrogenism has been observed in up to 50% of adolescent girls with menstrual disorders. Regarding PCOS, one recent report from India found its prevalence to be 9.13% among 461 adolescents in the community^[7]. There is a paucity of information on hormonal abnormalities in adolescent girls with menstruation disturbances. Therefore, this study was proposed to evaluate endocrine abnormalities like thyroid disorders,

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hyperprolactinemia, hyperandrogenism and PCOS in adolescent girls aged 10–19 years with menstrual disorders when compared to those without menstrual disorders.

METHODS

The present study was a prospective study conducted in the ANMMCH gaya, Bihar. All (148) adolescent girls (13–18 years) attending gynecological outpatient department from December 2018 to May 2019 were included in the study. The diagnosis of the condition requiring OPD consultation was noted. Menstrual history and general examination were noted. All adolescent girls

with puberty menorrhagia who required indoor admission for management of moderate-to-severe anemia in the study period were included in the study. demographic profile, duration and severity of symptoms, menstrual history, history of bleeding disorders, requirement of blood, and all investigations (including urine pregnancy test for exclusion of pregnancy, CBC, peripheral smear, blood grouping and typing, USG pelvis, thyroid profile, and coagulation profile). Statistical analysis of data is done by using proportion and percentage in Microsoft excel.

RESULTS

Table 1: Gynaecological problems (n=148)

Type of problem	No of cases	Percentage
Menstrual disorder	101	68.2
Vaginal discharge	27	18.2
Labia Majora abscess	02	1.4
Septic abortion	04	2.7
UTI	14	9.5

Table 2: Type of menstrual disorders in adolescent girls (n=101)

Type of menstrual disorders	No of Cases	Percentage	
Amenorrhoea	Primary	09	8.9
	Secondary	22	21.8
Dysmenorrhoea	Primary	12	11.9
	Secondary	04	4.0
Irregular Menses	Polymenorrhoea	07	6.9
	Oligomenorrhoea	29	28.7
	Menorrhagia	18	17.8

Table 3: Cause of Amenorrhoea in adolescent girls (n=31)

Cause of Amenorrhoea	No of Cases	Percentage	
Primary Amenorrhoea (n=9)	Mullerian agenesis	03	33.3
	Imperforate Hymen	02	22.2
	Androgen Insensitivity syndrom	04	44.5
Secondary Amenorrhoea (n=22)	Polycystic ovary syndrome	16	72.7
	Pregnancy	02	9.1
	Premature ovarian failure	04	18.2

Table 4: Cause of Menstrual Dysfunctional in adolescent girls (n=70)

Menstrual Dysfunctional	No of Cases	Percentage	
Dysmenorrhoea (n=16)	Primary	12	75.0
	Secondary	04	25.0
	Polycystic ovarian syndrome	05	9.3
Irregular Menses (n=54)	Hypothyroidism	09	16.7
	Hyperprolactinemia	07	12.9
	uterine bleeding	33	61.1

DISCUSSION

The present study shows that menstrual disorders are the commonest gynecological problem of adolescent age group. In our study, the chief complaints were menstrual disorders. 101 (68.2 %) out of 148 girls had menstrual problems in our study, which is comparable to the study

by Goswami Sebanti *et al.*⁸ These include primary amenorrhea, dysmenorrhoea, irregular menses. 31 (20.94 %) had amenorrhea, 16 (10.8 %) girls had dysmenorrhoea; 54 (36.5 %) girls had irregular menses, Vaginal discharge was seen in 27 (18.2 %) girls, Labia majora abscess was seen only 02 cases (1.4%) while

septic abortion and UTI was found in 04 (2.7 %) and 14(905%) respectively of adolescent girls. In our study out of the 101, cases 31 adolescent girls case of Amenorrhoea was Mullerian agenesis, Imperforate Hymen and Androgen insensitivity syndrome and we found no of cases 03(33.3%), 02(22.2%) and 04(44.5%) respectively. Out of 101 cases, 70 adolescent girls were menstrual dysfunction, i.e. Dysmenorrhoea and Irregular Menses. We have found 16(22.9%) dysmenorrhoea cases among menstrual dysfunction of adolescent girls and Irregular Menses was found 54(77.1%). The cause of Irregular menses was Polycystic ovarian syndrome, Hypothyroidism, Hyperprolactinemia and uterine bleeding. And we have found most of the cases was uterine bleeding 33(61.1%). In another study, Prachi Koranne *et al.* found that 50% of girls with puberty menorrhagia were in the age group of 13–15 years and 62% of the girls had onset of menorrhagia within 6 months of menarche.⁹ Gillani *et al.* found that 37% girls with puberty menorrhagia were in the 12–13 years age group, and 45 % girls were above 13 years of age. 11.42% girls had onset of menorrhagia within 6 months of menarche, 31.42% girls had between 6 months and 1 year, and 37.14% had onset of menorrhagia after 1 year of menarche¹⁰ Prasad *et al.* studied coagulation profile of adolescent menorrhagia cases. 35% of cases were found to be suffering from hemostatic diseases. The leading cause of menorrhagia was found to be von Willebrand disease and quantitative platelet disorders. They concluded that in the evaluation of puberty menorrhagia, we should rule out primary hemostatic disorders. The hematology laboratory facilities should be improved by adding the coagulation profile, including ristocetin induced platelet agglutination (RIPA) and VWF Ag assay, to the investigation.¹¹ Nazli Hossain *et al.* reported platelet function defect as an important cause for puberty menorrhagia.¹² Singh V *et al.* reported an extremely rare coagulation defect inherited as an autosomal recessive disorder with variable bleeding manifestation presenting with menorrhagia at the onset of menarche. Prolongation of pro-thrombin duration and that of activated partial thromboplastin duration with moderate deficiency of factor X were found.¹³

CONCLUSION

Adolescent health education and group discussion is needed to create awareness regarding adolescent gynecological problems; it should be conducted regularly

in schools and colleges. But very few adolescents were aware of the physiology involved in menstruation. Around half of all the adolescents were seen to follow proper menstrual hygiene.

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