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## AND ENGINEERING TRENDS

# Gynecological Problems in Adolescent Girls - A Clinical Study

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Abstract-Adolescence is the age between 10-19 years and is a period of enormous physical and psychological changes for young girls. Many girls in this age with menstrual problems never present to their family doctor or Gynaecologist. Embarrassment about discussing menstruation, fear of disease, and ignorance and lack of knowledge regarding the availability of health services will lead to late presentation to the consultant.

Keywords: Adolescent girls, puberty Menorrhagia, DUB.

### **I INTRODUCTION**

As per WHO adolescence is the age between 10-19 years. Adolescents constitute 21.4% of the population in India (1). It is the period where enormous physical and psychological changes occur. Hormonal events play a key role in this transition. Profound bodily changes, sexual development and altered emotional and behavioural changes are observed during this period, besides endocrine influences, genetic, nutritional and other environmental factors play an important role during this transitional period of life.

Adolescents have the lowest mortality among the different age groups so received low priority. Nutritional deprivation, increased demand of adolescent's body, and excessive menstrual loss all aggravate and exacerbate anaemia and its effects.

Many adolescents' girls with health problems never present to their family physician more so with menstrual disturbances. Embarrassment to discuss these problems, fear of disease and ignorance and lack of knowledge regarding the availability of health services lead to delayed presentation.

Menarche is considered as the central event of female puberty which is associated with emotional and psychological problems. The menstrual cycle involves the co- ordination of many events by the Hypothalamus – pituitary –ovarian and uterine axis and is influenced by environmental, genetic, nutritional, socio-economic and psychological factors (2). The mean age of menarche is between 12-13 years (3-5) menstrual bleeding lost 2-7 days in 80-90% adolescent girls, most cycles range from 21-45 days which even in the first year of menarche is normal. Changing 3-6 pads per day without much soiling from over wetting of the pads suggest normal flow (5).

Thus consideration should be given to girls whose cycles are longer than the above interval and having excessive flow with passing of clots. All adolescents with menorrhagia should be evaluated for thyroid disorders and coagulopathy (6).

Our study was done at Govt. Medical College; Anantapuram (A.P.) Where people from rural urban area and having low socio –economic status attend the OPD.

#### II AIM / OBJECTIVES

- 1. To Evaluate the Gynaecological problems in adolescent girls.
- 2. To assess the prevalence of anaemia mainly due to menorrhagia / menstrual disturbances.

## III MATERIAL AND METHODS

This present study was a retro – Spective analytical study conducted at Govt. Medical College and Hospital Anantapuram where we get the patients from rural & urban area. Ethical committee clearance and permission from hospital authorities to use the records was taken. All adolescent girls 11-19 years attending the Gynaec OPD from Jan to Aug. 17 were included in this study. The diagnosis of the condition requiring consultation was noted along with menstrual history and general examination was noted.

All adolescent girls who presented to the OPD were analysed regarding demographic profile, duration and severity of the symptoms, menstrual history, response to therapy and all investigations Viz: CBP, peripheral smear, blood grouping and RH typing, blood sugar, thyroid profile, serum prolactin levels. USG pelvis and Urine Pregnancy test for exclusion of Pregnancy in case of menstrual disturbance & menorrhagia, Statistical analysis of data was done.

# IV RESULTS

There were in total 1344 adolescent girls attended the GOPD constituting 9.46% of the total Gynaecological patients in our tertiary care hospital and medical college.

Menstrual problems (72.39%) were the commons complaint among all the problems 20 girls required hospitalization (2.05%) due to menorrhagia and severe anaemia who required blood transfusion.

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Most of the adolescents were in the age group of 16-19 years (80%) 17 girls had (85%) an – ovulatory DUB: hypothyroidism was noticed in 3 girls (15%).

Table: 1 Different Gynaecological problems in adolescent girls under study.

Symptoms	No	%
Menstrual irregularity Dysmenorrhoea	973	72.39%
White discharge-	85	6.32%
UTI-	248	18.45%
Primary Amenorrhea-	4	0.29%
Teenage Pregnancy	34	2.52%
Total	1344	100%

Table: 2 Different types of menstrual irregularities

Oligo- menorrhoea	146	15.005%
Menorrhagia-	168	17.26%
Poly Menorrhoea	129	13.25%
Spasmodic Dysmorrhoea	437	44.91%
PCOD	93	9.5%
Total	973	100%

Table: 3 Causes of abnormal uterine bleeding in adolescents

Hormonal:	Immaturity of HPO axis	
	Anovulatory syndromes	
	Ovarian failure	
	Estrogen break – through /	
	with drawal blood	
<b>Exogenous hormones:</b>	OC pills	
	Progesterone use	
Coagulation disorder :	Leukemia	
	ITP	
	Von – Wille brand disease	
	Coagulopathies – Hepalic	
	failure warfarin therapy	
Trauma	Accidental injury	
Trauma	Sexual abuse	
Systemic disease	Hypothyroidism	
	Hyper – Prolactinomas	
	Androgen excess disorders	
	PCOS	

Table: 4 Causes of Menorrhagia in this study

Anounlatory DUB	17	85%
Hypothyroidism	3	15%
Total	20	100

All the patients with menorrhagia were treated with tablet tranexamic -acid 500 mg. b.d. to start with & mefenamic acid was added in case of associated dysmenorrhoea. In cases with sub clinical hypothyroidism thyroxin supplementation was given, In cases with

anovulatory DUB progesterone supplementation was given those with PCOS were started on cyproterone - acetate & ethnyl / estraediol combination for 6 cycle along with Iron preparations and advice regarding weight reduction where ever it is applicable.

#### V DISCUSSION

Adolescence is the age between 10 and 19 years. Puberty is the period of transition from childhood to adult sexual maturation. Menarche is the hallmark event in the life of adolescent girls.

The present study shows that menstrual problems were the commonest complaint accounting for 72.39 % which is comparable to the study by Goswami sebanti et al (7). These include irregular periods, oligo- Menorrhoea, primary & secondary amenorrhoea, and dysmenorrhoea PCOD was noted in 9.5%, Joshi et.al in their study (8) reported that 14% of the adolescents had PCOD. Out of 168 girls with menorrhagia 20(11.9%) girls required hospitalization for blood transfusion. Most of them (11.9%) were in the age group of above 16 years. In another study Prachi Koranne etal found that 50% of the girls with puberty Menorrhagia were in the age group of 13-15 years (9) An ovulatory DUB was (85%) the commonest cause in our study: comparable to other studies in India (8-10).

Nazil Hossain et al (11) reported platelet function defect as an important cause for pubertal menorrhagia. Philips et al reported that 45% of women with; bleeding disorders had abnormal platelet aggregation (12).

In our study Hyperthyroidism was noted in 15%, but studies by Prachi Koranne noted only in 5.8%.

Nita K Patel et al in their study showed that the use of Norethisterone for the treatment of pubertal menorrhagia was more effective and well tolerated than OC Pills (13).

Heavy bleeding was treated with med Roxy progesterone 10 mg TDS /day for 14 days, Progesterone as medical curettage in the form of norethisterone 20-30 mg daily for 3 days to arrest the bleeding followed by 21 days at a lower dose can be used.

## VI CONCLUSION

Menstrual problems are the commonest reason for gynaecological OPD consultation among the adolescent girls any menorrhagia problem need to be evaluated thoroughly before considering them as normal physiological transition. Because anaemia due to menorrhagia is a major concern which will have its squeal in feature like major contributor for maternal morbidity and mortality, so earlier and effective management of menstrual problems can prevent the consequence of anaemia. Childhood obesity, junk food intake, sedentary life style, lack of exercise and stress in adolescent age will lead to the increasing incidence of PCOS which is a challenge for gynaecologist.



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Health education classes to create awareness regarding adolescent gynaecological problems, menstrual hygiene and the need to take sufficient oral liquids to prevent UTI. Should be conducted regularly at the schools and colleges. Avoidance of junk food healthy life style, yoga etc. must be encouraged and be a part of school health programs. Conflict of interest - No conflict of interest by authors. Ethical committee approval was taken.

### VII ACKNOWLEDGMENT

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