ORIGINAL RESEARCH PAPER

Volume-7 | Issue-9 | September-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

OBSTETRICS AND GYNAECOLOGICAL PROBLEMS OF ADOLESCENT GIRLS ATTENDING OUTPATIENT DEPARTMENT AT TERTIARY CARE CENTRE:

Gynecology

Anjali Tudu MD. Obs. and Gynae. RIMS Ranchi,

Mirja Tudu* MD. PSM, associate professor MGM Medical college Jamshedpur *Corresponding Author

ABSTRACT

Introduction: Adolescent age is vulnerable period of life as they bear lot of physical, emotional, and social challenges. Many adolescents with menstrual disturbances never present to doctor. Embarrassment about discussing menstruation, fear of disease, and ignorance about services available may lead to delayed consultation with doctor.

Aim: To evaluate the different obstetrics and gynaecological problems in adolescent girls.

Methods: Girls 13 -19 years attending emergency and OPD of RIMS, were studied for type of gynaecological and obstetrical complain.

-70 girls (13 -18 yrs.) were studied History, examination, investigation (CBC, PBS, coagulation, thyroid profile, hormone study, sonography and karyotyping done if required.

In this age gynaecological examination is a social stigma and lot of multifactorial factors affect this age. A young girl is the foundation of future motherhood. So, a study of obs and gynae problem were studied for type of problem and causative factors.

Results: There were total of 70 adolescent girls attending the gynaecology department during the study period. Menstrual complain were commonest indication for OPD consultation among adolescent girls followed by vaginal discharge. Menstrual abnormalities were in the form of irregular menstruation, ammenorhoea and dysmenorrhoea. Dysfunctional uterine bleeding was the commonest cause of irregular menstruation. 13 out of 70 girls required blood transfusion due severe anaemia resulting from puberty menorrhagia. 11 out of 70 girls complained of white discharge.

Conclusion: Menstrual abnormalities are the most common problem of adolescents. Adolescent girls with menorhagia need to be evaluated thoroughly. Health education is needed to create awareness among the adolescent age group in school and colleges.

KEYWORDS

Adolescence, Teenage, Gynaecological Problems, Puberty Menorhagia, Health Education.

INTRODUCTION:

Adolescence, transitional phase of growth and development in childhood and adulthood. The world health organization (WHO)defines an adolescent as any person between ages 10-19. It is characterised by physical and psychological changes according to WHO age limit is 10-19 years but the changes may begin before and continue after this age group. It is a period of multiple transition involving education, training, employment and unemployment, as well as transition from one living circumstances to other. Adolescents constitutes over 21.4% of the population in India. [1] The age of menarche is determined by general health, genetic socioeconomic, and nutritional factor.[2]The mean age of menarche is between 12 to 13 yrs.[3-5]

There are various gynaecological problems of adolescents which need to be evaluated. Thus, study has been designed to find the gynaecological problems of the adolescents attending gynaecological OPD and emergency with study the different types of problems and its causative factors.

AIMS AND OBJECTIVES: To evaluate the different gynaecological problems in adolescent girls attending emergency and outpatient department.

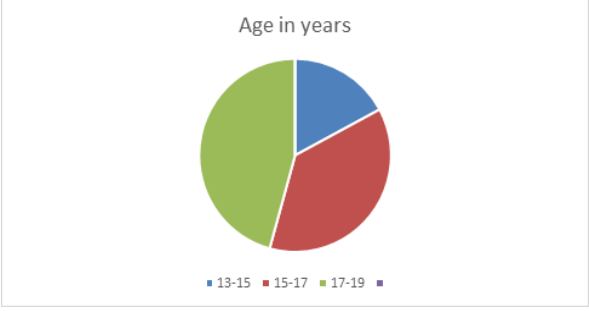
METHODS: The present study was a prospective study conducted in Rajendra Institute of Medical Science Ranchi, between March 2017 – May 2017. Detailed history taken, menstrual history and general examination, secondary sexual characters and any congenital anomalies was noted. Investigation such as haemogram, coagulogram, hormonal assess (FSH, LH, Prolactin and thyroid profile), ultrasonography and karyotyping were done when indicated.

RESULTS:

 # TABLE-01

Age distributions -

Age in years	Number	Percentage %
13-15	12	17.14%
15-17	26	37.14%
17-19	32	45.72%



 # TABLE -02

Distribution of BMI -

BMI	Number	Percentage %
<19- underweight	43	61.42%
19-25 normal	25	35.71%
25-30 overweight	2	2.85%
> 30 morbid obesity	0	0

 # TABLE-03

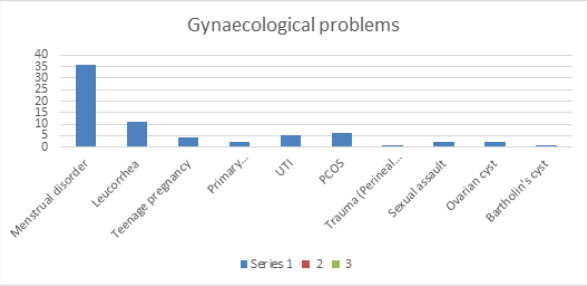
Marital status -

Status	Number	Percentage %
Unmarried	62	88.57%
Married	8	11.42%

 # TABLE- 04

Gynaecological problems -

TYPES	NUMBER	PERCENTAGE
Menstrual disorder	36	51.42%
Leucorrhea	11	15.71%
Teenage pregnancy	4	5.71%
Primary amenorrhea	2	2.85%
UTI	5	7.14%
PCOS	6	8.57%
Trauma (Perineal injury)	1	1.42%
Sexual assault	2	2.85%
Ovarian cyst	2	2.85%
Bartholin's cyst	1	1.42%



 # TABLE -05
Types of menstrual disorder:

DISORDERS	NUMBER	PERCENTAGE
Menorrhagia	20	43.33%
Dysmenorrhea	11	23.9%
Oligomenorrhea	3	6.5%
Polymenorrhea	2	4.3%
Primary amenorrhoea	2	5.5%
Secondary amenorrhoea	8	17.3%

#TABLE -06
Causes of Menstrual Dysfunction:

Types of menstrual disorder	Number	Percentage
Dysmenorrhea	11	15.28
1. Primary	9	12.5
2. Secondary	2	2.78
Irregular menses	25	34.72
1.DUB	17	23.61
2.Hypothyrodism	1	1.39
3.Hyperprolactinamia	1	1.39
4.PCOS	6	8.33
5.Clotting disorder	-	

 # TABLE -07
Causes of amenorrhea:

Primary amenorrhea	Imperforate Hymen	1
	Mullerian agenesis	1
Secondary amenorrhea	Pregnancy	2
	PCOS	6

 # TABLE -08
Age at menarche:

Age at menarche	Number	Percentage
10-12 years	0	0
13-14 years	36	51.42%
15-16 years	30	42.85%
> 16 years	2	2.85%

RESULTS:

Table 1 shows the distribution of adolescent girls attending gynaecology OPD and emergency. Maximum adolescent girls attending gyanecological OPD had ages in the range of 17-19 years (45.71%) followed by 15-17years (37.14%).

Table 2 shows the majority of girls were underweight with BMI <19 (43 out of 70) 61.42%. This could be due to poverty, illiteracy prevelant in our country.

Table 3 shows 8 out of 70 adolescent girls were married (11.42%). Therefore, they are more prone to STDs and reproductive tract infections. Adolescent marriages are still high in our country that leads early sexual activity, teenage pregnancy and its complications.

Table 4 shows majority of adolescent girls suffer from menstrual disorder that is 36 out of 70 (51.42%) followed by leucorrhea 11 (15.7%), PCOS 6 (8.5%), UTI 5 (7.14%), teenage pregnancy 4 (5.71%), primary amenorrhea 2 (2.85%), sexual assault 2 (2.85%), ovarian cyst 2 (2.85%), trauma (perineal injury) 1 (1.42%), Bartholin's cyst 1 (1.42%).

Table 5 shows type of menstrual disorder. 43.4% girls suffered from menorrhagia, 23.3% had dysmenorrhoea, 6.5% girls suffered from oligomenorrhoea, 4.3% girls suffered from polymenorrhoea ,5.5% suffered from primary ammenorhoea and 17.3% suffered from secondary ammenorhoea.

On assessing the degree of anaemia in adolescent girls suffering from menorhagia. 8 out of 20(40%) girls had haemoglobin less than 6.5gm%, 6(30%) girls had haemoglobin in the range of 6.5-8.5gm% and 6 (30%)girls had haemoglobin in the range of 8.5-10gm%. 13 out of 20(65%) girls with menorrhagia required blood transfusion along with hormones and haematinics and remaining 9 girls (35%) required only hormones and haematinics

Table 6 - On investigating the cause of irregular menses 17 out of 25 girls (68%) no cause could be ascertained that is they suffered from dysfunctional uterine bleeding and 1 out of 25 (4%) adolescent girls hypothyroidism was seen and 6 out of 25(24%) suffered from PCOS and 1 out of 25 (4%) suffered from hyperprolactinaemia.

Table 7 shows 2 out of 10 (20%) adolescent girls with primary amenorrhea, 1 girl had imperforate hymen and 1 girl had Mullerian agenesis. 8 adolescent girls presented with secondary amenorrhea. 2 out of 8 girls had pregnancy and 6 out of 8 had PCOS.

Table 8 shows the age of menarche. Maximum number 36 out of 70 (51.42%) adolescent girls attending menarche at age group of 13-14year

DISCUSSION:

Menarche is the hallmark event in the life of adolescent girls. It marks the transition from childhood to puberty. Most common gynaecological problems in the adolescent girls are the menstrual complaints and it is the commonest reason for consultation with doctors. In present study shows that menstrual disorder is the commonest gynaecological problem of adolescent age group and these ranged from amenorrhea to menorrhagia. In our study the chief complains were menstrual problem which is comparable to study by Goswami sebanti et al. [6] These include menorhagia, irregular menses, dysmenorhea, secondary amenorhoea, oligomenorrhea.

2 girls (2.8%) has primary amenorrhea, 25 girls (35.7%) had irregular menses,11 girls (15.7%) had dysmenorhea. PCOS seen in 6 (8.5%) girls while dysfunctional uterine bleeding was found in 17 adolescent girls.

Out of 17 girls with DUB, 9 girls required hospitalization for blood transfusion for correction of anaemia and menorhagia which is very high than the study of khosla AH et al.[7].Out of the 17 girls 7 girls were in the age group of above 16 yrs.9 girls had onset of menorhagia within 6 months of menarche.7 girls had onset of menorhagia between 6 months and 1year of menarche and 4 girls within 1-2 year of menarche.

In another study Prachi. Koranne et al found that 50% of girl with puberty menorhagia were in the age group of 13-15 yrs and 62% of girls had onset of menorhagia within 6 months of menarche. [8]. Gillian et al. found that 37% girl with puberty menorhagia were in the 12-13 yrs of age.31.42% girls had between 6 months and 1yr, and 37.14% had onset of menorhagia after 1yr of menarche. [9]

Anovulatory DUB was the commonest cause (68%) in our study followed by hypothyroidism which are comparable to other studies in India. Anovulatory DUB is the cause in (52%) of the patient requiring hospitalization which is comparable to many other studies. [7-9]

Anovulation is due to immaturity of the hypothalamo pituatary axis. It may take 2 to 5 yrs for complete maturation of hypothalamo pituatary Axis. [10]

6 girls in our study were diagnosed as PCOS. In the study Goswami Sebanti.et al PCOS was the second most common cause for menstrual dysfunction and menorhagia.Joshi.et.al reported 14% of adolescent girls had PCOS.

In our study 1 girls with puberty menorhagia had hypothyroidism this is comparable to studies by Prachi Koranne et .al, Manaswini. et.al.[9,11,12]

In some other Indian studies, genital tuberculosis, polyps, factor x deficiency were found as uncommon cause of menorhagia.

In our study (40%) adolescent girls had haemoglobin level <6.5, (30%) adolescent girls in the range of 6.5-8.5 and (30%) girls in the range of 8.5 -10 gm%. A Shanti Sri et. al analyzed in the study and found that 12.5% girls had Hb level <5 gm%, 29.16% girls had Hb level between 5 and 7 gm%,27.8% girls had Hb level of 7-10 gm% and 31.25% girls had Hb level >10 gm%. [11]

In present study, primary amenorrhoea accounted for (2.85%) [2/70] of cases. Mullerian agenesis was found in 1 cases. This case underwent vaginoplasty.1 cases of primary amenorhoea presented with cyclic pain abdomen, retention of urine, haematocolpus and was treated with cruciate incision of hymen. Secondary amenorrhea due to teenage pregnancy accounted for (5.71%)4/10. Out of which 2 were married and pregnancy was planned, consulted doctor at 16 weeks of pregnancy and 2 were unmarried. Unmarried pregnancy presented between 8-10 weeks.MTP was done in these subjects. There should be proper counselling about safe sex and contraception to prevent unwanted pregnancy as it predisposed to STIs, an RTIs (septic abortion and PID) affecting future reproductive health.

Primary dysmenorhoea was seen in 9 cases. Their siblings and mother also had similar problem. Endometriosis was diagnosed by ultrasound in 2 cases of secondary dysmenorhoea which was treated by removal of endometriotic cyst at laparotomy in one cases and the other case was managed medically.

Vaginal discharge was second commonest complaints 11/70 (15.71%) cases. All of them had physiological leucorrhea which responded to counselling and maintainance of hygiene.

Ovarian cyst was found in 2/70 cases (2.85%). One was simple functional cyst and other was dermoid cyst.Sebanti.et.al had reported higher incidence of ovarian tumour (15.32%) in their studies.

Sexual assault was seen in 2 out of 70 (2.85%) adolescent girls in our society, sexual assault may lead to lower self esteem, depression, unwanted pregnancies and criminal abortions among adolescents.

1 case of perineal injury was found due to fall from bicycle.

CONCLUSION:

Menstrual problems are commonest reason for gynaecological OPD consultation among teenage girls. Teenage problems are need to be dealt with carefully. Adolescent girls with menorrhagia need to be evaluated thoroughly so that effective management can get started early and its consequences can be prevented. Health education should be provided to create awareness regarding the adolescent gynaecological problems. Safe sex practices, STI and emergency contraception should be included in the sex education. Avoidance of junk food, healthy lifestyle, yoga, meditation etc must be encouraged in adolescent girls.

REFERENCES

1. Hanson M. Gluckman P. Evolution: development and timing of puberty. Trends Endocrinol Metab.2006;17(1):7-12
2. Flug D, Largo RH, Proder TO. Menstrual patterns in adolescent swiss girls a longitudinal study. Amm Hum Biol. [1984]; 11:495-508
3. World Health Organization Task force on adolescent reproductive health. World health organization multicentre study on menstrual and ovulatory patterns in adolescent girls. A multicentre cross sectional study of menarche. J Adolesc Health Care.1986;7:229-35
4. Herman-Giddens ME,Slora EJ,Wasserman RC,et al.Secondary sexual characteristics and menses in young girls seen in office practice: a study from the paediatric research in office settings network. Paediatrics.1997;99:505-12.
5. Adams Hillard PJ.Menstruation in young girls. A clinical perspective.Obstet Gtnecol.2 002;99:655-62.
6. Goswami S. Dutta R. Sengupta S.A profile of adolescent girls with gynaecological problems.J Obset Gynaecol India.1990;55(4):353-5.
7. Khosla AH, Devil LGoel P,et al.Puberty menorhagia requiring in patient admission.J Nepal Med 2010:49(178):112-6
8. Koranne SP,Wahane RP.Puberty menorhagia in modern era; analysis in a tertiary care centre. Internatinal journal of reproduction, contraception.Obset Gynecol. 2014:3 (3):622-6
9. Gilliani S, Mohammad S.Puberty menorrhagia: causes and management. J Med Sci 9 (Peshawar, print)2012;20(1):15-8
10. Parker MA, Sneddon AE, Arbon P. The menstrual disorder of teenagers (MDOT) Study: determinigtypical menstrual patterns and menstrual disturbances in a large population - based study of Australian teenagers. BJOG 2010;117:185-92
11. Shanti SA, Jehan A. Puberty menorhagia: evaluation and management.J Evol Med Dent Sci.2015;4(30):5198-203
12. Khuntia M Behera P. Etiology and management of puberty menorhagia in adolescent girls. Int J Recent Trends Sci Technol.2015;14(2):406-9