



Original Research Article

Study of Gynaecological Problems Faced by Adolescents in a Tertiary Care Centre

Authors

Anamika^{1*}, Sujata Kumari², Rakhi Singh³

¹Senior Resident, Department of Obstetrics and Gynaecology, P.M.C.H, Patna

²Assistant Professor, Department of Obstetrics and Gynaecology, P.M.C.H, Patna

³Assistant professor, Department of Obstetrics and Gynaecology, P.M.C.H, Patna

*Corresponding Author

Dr Anamika

Senior Resident, P.M.C.H, Patna, India

Abstract

Introduction: *The golden period of adolescence hallmarks the beginning of a prospective future woman. Studying the gynaecological aspects of the problems faced by an adolescent girl will guide us to the better management and behold the promise of a healthier adult.*

Aims and Objectives

1. To study prevalence of gynaecological health problems in adolescent population.
2. To study the etiology of various problems

Materials and Methods: *A total of 400 girls aged 10 to 19 years were included in the study. After detailed history and physical examination subjects were evaluated on basis of ultrasound, hemogram, routine urine, hormonal study, coagulation profile etc.*

Results: *Menstrual disorders were the commonest problem faced by adolescents seeking medical help (62.5%) followed by pain lower abdomen (17.25%), leucorrhoea (5.75%), unwed teenage pregnancy (5%), breast related disorders(4.5%), septic abortion(3.5%) and sexual assault(1.5%).*

Conclusion: *Adolescent gynaecology needs major focus as timely diagnosis and intervention will promote better healthcare.*

Keywords: *adolescence, Menstrual disorder, teenage pregnancy.*

Introduction

Adolescent is one who is no longer a child and not yet an adult. WHO defines adolescent as any person between 10 and 19 years of age^[1]. It is the period of onset of enormous physical and psychological changes for young girls, exposing them to the problems of unforeseen territory of reproductive organs and causing embarrassment for which consultation is usually sought late. We

as healthcare providers, need to focus on these young people, as investing in their health will reap rich rewards tomorrow-UNFPA.

Aims and Objectives

1. To study the prevalence of gynaecological health problems in adolescent population,
2. To determine the etiology of associated problems.

Materials and Methods

This was a prospective study of 400 girls between 10 and 19 years of age visiting the gynaecological opd and labour room emergency of P.M.C.H, Patna between July 2018 to June 2019.

Detailed history was taken and physical examination was done. Further investigations were done based on individual needs:

Irregular or scanty menses –ESR, Serum TSH, Serum prolactin, usg pelvis

HMB-CBC, peripheral smear, LFT, coagulation profile, Serum TSH, usg pelvis

Pain lower abdomen-urine r/e, c/s, USG pelvis

Amenorrhoea -UPT, Serum TSH, Prolactin, FSH, LH, ESR, USG pelvis

Results

Menstrual disorder was the most common presenting complaint in gynaecological opd accounting for 62.5% of the adolescents. The second most common cause for opd visit was pain lower abdomen in 17.25%. 5.75% adolescents presented with leucorrhoea. The percent of girls with unwed teenage pregnancy was 5%. Breast related complaints were present in 4.5%. 3.5% girls came with septic abortion. 1.5% of girls came due to sexual assault. (Table 1)

Table 1: Prevalence of Adolescent Gynaecological Problems

CAUSE	PERCENTAGE
MENSTRUAL DISORDER	62.5%
PAIN LOWER ABDOMEN	17.25%
LEUCORRHOEA	5.75%
UNWED TEENAGE PREGNANCY	5%
BREAST RELATED DISEASE	4.5%
SEPTIC ABORTION	3.5%
SEXUAL ASSAULT	1.5%

Menstrual disorders comprised of irregular menses in 62.4% cases, amenorrhoea in 20.4% cases and dysmenorrhoea in 17.2% cases. (Table 2.)

Table 2: Pattern of Menstrual Disorder

PATTERN	PERCENTAGE
IRREGULAR MENSES	62.4%
AMENORRHOEA	20.4%
DYSMENORRHOEA	17.2%

The most common form of menstrual disorder was irregular menses which presented with oligomenorrhoea in 59.62% cases, heavy menstrual bleeding in 30.77% cases and polymenorrhoea in 9.61% cases. Oligomenorrhoea was physiological in 44% cases, due to pcod in 40% cases, due to hypothyroidism in 8% cases and due to chronic disease in 8% cases. HMB was due to immature HPA axis in 58% cases, due to coagulation disorder in 21% cases, due to hypothyroidism in 17% cases and liver disease in 4% cases. (Table 3)

Table 3: Causes of Irregular Menses

CAUSE	PERCENTAGE
OLIGOMENORRHOEA	59.62
Physiological	44
Pcod	40
Hypothyroidism	8
Chronic diseases	8
HEAVY MENSTRUAL BLEEDING	30.77
Immature hpa axis	58
Coagulation disorder	21
Hypothyroidism	17
Liver disease	4
POLYMENORRHOEA	9.61

Primary amenorrhoea was due to mullerian agenesis in 85% cases due to cryptomenorrhoea in 7% cases, due to hypogonadotropic hypogonadism in 4% case and due to turners syndrome in 4% cases. Secondary amenorrhoea was due to PCOD in 62.5% cases, due to pregnancy in 26% cases, due to Premature ovarian failure in 6.5% cases and due to genital TB in 5% cases. (Table 4.)

Table 4: Causes of Amenorrhoea

PRIMARY	SECONDARY
MULLERIAN AGENESIS 85%	PCOD 62.5%
CRYPTOMENORRHOEA 7%	PREGNANCY 26%
HYPOGONADOTROPIC HYPOGONADISM 4%	POF 6.5%
TURNERS SYNDROME 4%	GENITAL TB 5%

Pain lower abdomen was the second leading complaint for opd visits. UTI was cause in 36.23%. PID was present in 24.63% and 17.39% had ovarian tumours/cysts. 21.73% girls had pain lower abdomen due to non gynaecological cause.

5.75% of adolescents had leucorrhoea which was mostly physiological.

5% girls came with unwed teenage pregnancy.

4.5% girls came to opd due to breast related problems. 67% had mastalgia, 28% had breast lump and 5% girls came with nipple discharge.

3.5% of girls came with septic abortion.

1.5% girls came due to sexual assault.

Discussion

Adolescence is the golden period when a girl is getting prepared for her reproductive roles in future.

Only healthy adolescents will become healthy adults and to improve the health status of today's youth, the first step is "assessment of their specific health problems".

With this goal in mind the present study was done. According to my study the mean age of adolescent population was 17.5 +/- 2.5 years.

Mean age of menarche was 12.5 +/- 1.02 years.

Menstrual disorders were faced by 250 out of 400 (62.5%) adolescents becoming the leading cause for opd visits. This was comparable to study done by Prakriti Goswami et al (60%).^[1]

Irregular menses was the commonest menstrual disorder seen in 156 out of 250 girls (62.4%). This finding was comparable to study done by Jain A et al (58.3%)^[2]. Amenorrhoea was seen in 51 out of 250 girls (20.4%). This finding was comparable to study done by Ramaraju HE et al who reported amenorrhoea in 21.62% of menstrual disorders^[3]. Dysmenorrhoea was seen in 43 out of 250 girls (17.2%).

Irregular menses ranged from oligomenorrhoea present in 93 out of 156 girls (59.62%), HMB present in 48 out of 156 girls (30.77%), and polymenorrhoea seen in 15 out of 156 girls (9.61%). This pattern of menstrual irregularity was also seen in study done by Jain A et al^[2]

Oligomenorrhoea was due to physiological cause in 44%. PCOD was commonest treatable cause in 40%. 8% of oligomenorrhoea was due to hypothyroidism and 8% due to chronic diseases including genital TB.

HMB in adolescents was due to immature HPA axis in 58% cases. It may take 2 to 5 years for the complete maturation of the hypothalamic pituitary ovarian axis^[4]. This leads to anovulatory type of AUB. Most of the cases of mild to moderate bleeding responded well to mefenamic acid and tranexamic acid. The ones presenting as severe bleeding of puberty menorrhagia requiring hospitalization and multiple blood transfusions responded well to high dose progesterone. Coagulation disorders including thrombocytopenia accounted for 21% HMB cases based on CBC, platelet count, PT and APTT. For further workup such cases were referred to hematologist. Von Willebrand disorder is the most common bleeding disorder seen in 1-1.6% of people and can occur in 5-15% of women with menorrhagia (HMB)^[5]. 17% of cases of HMB were due to hypothyroidism. 4% were due to liver disorders.

Primary amenorrhoea was present in 28 out of 250 girls (11.2%) and maximum cases were due to Mullerian agenesis seen in 85% adolescents. Out of which 6 cases had solitary kidney. 16 girls underwent McIndoe vaginoplasty and rest were counseled for vaginoplasty near consummation of marriage. Cryptomenorrhoea was present in 7% which were due to imperforate hymen or transverse vaginal septum. 1 case of OHVIRA Syndrome was also seen. Hypogonadotropic hypogonadism and Turner's syndrome accounted for 4% each in primary amenorrhoea cases.

Secondary amenorrhoea was most commonly due to PCOD (62.5%). Jain A in her study found 75% cases of secondary amenorrhoea were due to PCOD^[2]. Although the presence of polycystic ovary morphology (PCOM) is included as a key diagnostic criterion of PCOS in adults, it is currently not recommended for the diagnosis in adolescents.^[6] Hence, ovulatory dysfunction and androgen excess in form of hirsutism, acne or testosterone excess were used for diagnosis. COC were used for menstrual irregularity, hirsutism, acne for 2 to 3 months. Metformin was used if glucose intolerance or obesity coexisted.

Secondary amenorrhoea was due to pregnancy in 26% cases, due to Premature ovarian failure in 6.5% cases and due to genital TB in 5% cases.

Pain lower abdomen was the second most common complaint for opd visits. UTI was diagnosed in 25 out of 69 girls visiting due to pain lower abdomen(36.23%)and accounting for 25/400(6.25%) of all opd visits for adolescent girls. Rathod et al reported an incidence of 5.4% cases of UTI in her study which was comparable to my study^[7]. 17 girls had symptoms suggestive of PID (24.63%) and 12 girls had ovarian tumours/cysts (17.39%). 15 girls had pain lower abdomen due to non gynaecological cause(21.73%).

23 out of 400 (5.75%) of adolescents came with complaint of leucorrhoea which was mostly physiological. Sri Lakshmi et al had similar finding in her study that6.32% of adolescents had leucorrhoea^[8]. Leucorrhoea can be physiological or pathological. Increased level of endogenous estrogen leads to marked overgrowth of endocervical endothelium,which may encroach outward and produce ectocervical erosion leading to excess discharge^[9]. Most of cases were physiological discharge and responded with advice for vaginal hygiene management.

20 Girls with unwed teenage pregnancy came to our centre accounting for 5% of all visits.14 were less than 20 weeks of period of gestation and were terminated. 6 were greater than 20 weeks. Out of which 1 girl presented to LR room with obstructed labour and underwent emergency LSCS.

18 out of 40 girls (4.5%) came to opd due to breast related problems. This was similar to study done by Jain A et al who reported 3.3% girls visiting for breast disorders^[2]. Mostly required reassurance.10 out of 18 girls(67%) had mastalgia ,7 out of 18 girls(28) had breast lump ,all of which were benign.1 girl came with complaint of nipple discharge which later resolved after treatment of her hypothyroidism.

14 out of 400(3.5%) of girls came with septic abortion. Ramaraju et al found 3% incidence in

his study^[3]. 4 out of 14 girls had associated renal failure.

6 out of 400 girls (1.5%) came due to sexual assault. The injuries ranged from button hole tear in posterior vaginal wall to complete perineal tear which were repaired.

Conclusion

Menstrual disorders are the commonest cause for seeking gynaecological consultation among adolescent girls. PCOD is an important cause for Oligomenorrhoea and amenorrhoea. Lifestyle measures and timely medical intervention will prevent future medical dilemmas. Bleeding disorders are an important cause for HMB and should always be ruled out if suspected based on history and investigations. Adolescent contraception is the need of hour. Government should promote sex education and contraceptive counseling as more and more teens are becoming sexually active. This will prevent the cases of septic abortions and teenage pregnancies and their associated complications.

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