

Original article

Adolescent gynaecological problems in a tertiary care centre

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Abstract

Objective: Our objectives was to study the gynaecological problems in adolescents and its causative factors.

Methodology: A total of 100 girls (13-18 years) attending gynaec OPD and emergency were included in the study. A detailed history and physical examination was done. Investigations like haemogram, coagulation profile, hormonal assays, sonography, karyotyping etc. were done as and when indicated.

Result : Menstrual disorders were commonest gynaecological problems 74% followed by vaginal discharge 17% and ovarian tumours 4%. Menstrual abnormalities were in the form of amenorrhoea 21.62%, irregular menstruation 59.45% and dysmenorrhoea 18.91%. Dysfunctional uterine bleeding was the commonest cause of irregular menstruation 27/44. Endocrinal abnormalities like hyperprolactinemia (4 cases), and hypothyroidism (3 cases) were present among 20 cases of oligomenorrhoea. Teenage pregnancy was cause of secondary amenorrhoea in 3 cases.

Conclusion : Menstrual abnormalities are the most common problem of adolescents. Adolescent gynaecology needs increased awareness and greater attention in order to protect and promote the health of teenagers. This can perhaps best be done by setting up specialized adolescent clinics.

Key words: adolescence, teenage, gynaecological problems

Introduction

Adolescence is the transitional period of life when the carefree child becomes the responsible adult. It is characterized by physical and psychological changes backed by the profound polyglandular endocrinological adjustments. According to WHO, age limit is 10 to 19 years, but the changes may begin before and continue after this age group¹. Developmental changes rather than age limits or physical milestones are probably the best markers. Gynecological problems of adolescents occupy a special space in the spectrum of gynecological disorders of all ages.

In this age physical nature of problems is unique; and emotional and psychological factors are also associated^{2,3}. With this preview, a study has been done to find the gynecological problems of the adolescents attending gynecological OPD and

emergency with the aim to study type of problems, causative factors and treatment modalities.

Methodology

A total of 100 girls in the age group of 13 to 18 years attending gynaecology OPD or emergency in Vijaya Nagara Institute of Medical Sciences, Bellary between July 2010 to June 2011 were included in the study. A detailed history was taken. First, the girl was interviewed regarding her problems and then girl's mother, was interviewed to get the details of any previous medical problems. Physical examination including height and weight, general examination, secondary sexual characters, and any congenital anomalies was noted. At the end of examination, nature of problem was discussed with the girl and parent. Privacy, comfort and friendliness were provided to the patient for getting any confidential information and sexual

activity. Investigation such as haemogram, coagulogram, hormonal assays (FSH, LH, Prolactin, and Thyroid profile), ultrasound

examination of abdomen and pelvis, karyotyping was done as and when indicated.

Results

Table-1: Gynaecological problems

Types	Number	Percent
Menstrual disorder	74	74%
Vaginal discharge	17	17%
Ovarian tumours	4	4%
Septic abortion	3	3%
Sexual assault	2	2%

Menstrual disorders were the commonest problem 74% followed by vaginal discharge 17%.

Table-2: Type of menstrual disorders

Type of Menstrual Disorder	Number
Amenorrhoea	16 (21.62%)
Primary	7
Secondary	9
Menstrual Dysfunctions	
Dysmenorrhoea	14 (18.91%)
Primary	12
Secondary	2
Irregular Menses	44 (59.45%)
Menorrhagia	15
Polymenorrhoea	9
Oligomenorrhoea	20

Menstrual abnormalities were in form of amenorrhoea 21.62% , irregular menstruation 59.45% and dysmenorrhoea 18.91%. Menorrhagia was present in 15 subjects with three of them having Hemoglobin <5gm/dl, nine had 6-8gm/dl and three had >8gm/dl.

Table-3: Causes of Amenorrhoea

Causes	Number
Primary Amenorrhoea	7
Imperforate Hymen	5
Mullerian agenesis	1
Turner's syndrome	1
Secondary Amenorrhoea	9
Polycystic ovarian disease	6
Pregnancy	3

Table-4: Causes of Menstrual Disorder.

Types of Menstrual Disorder		Number
Dysmenorrhoea		14
	Primary	12
	Secondary	2
Irregular Menses		44
Dysfunctional uterine bleeding		27
Polycystic ovarian syndrome		9
Hypothyroidism		3
Hyperprolactinemia		4
Clotting disorder (ITP)		1

DUB defined as uterine bleeding in the absence of detectable pelvic pathology was the commonest cause.

Discussion

Disturbances of menstruation, either actual or perceived, are the commonest presenting complaint in adolescent gynaecology clinic 75% of the new patients¹. The present study also shows menstrual disorders as commonest adolescent gynaecological problem 74%. These ranged from amenorrhoea to menorrhagia. In present study, primary amenorrhoea accounted for 7%, which is similar to that reported by Sebanti et al³ (6.45%). Mullerian agenesis was found in one out of seven cases of primary amenorrhoea which had solitary kidney. Five cases of primary amenorrhoea presented with cyclic abdomen pain, retention of urine and hematocolpos (imperforate hymen) and were treated with cruciate incision of hymen. One case was diagnosed as Turner syndrome. Secondary amenorrhoea due to teenage pregnancy accounted for 3% cases in our study. This is similar to that reported by Sebanti et al³ (4.30%). All presented between 8-12 weeks. MTP was done in these subjects. The problem of preventing unwanted pregnancies needs to be urgently addressed^{4,5}, as it predisposes them to STIs, and RTIs (septic abortion and PID) affecting future

reproductive health. PCOS based on clinical criteria of menstrual problem, features of hyperandrogenism and

USG finding of multiple ovarian cysts was diagnosed in 6/9 cases of secondary amenorrhoea. There were 9 more cases of PCOS, who had presented with oligomenorrhoea. Thus PCOS was cause of irregular menses in 15% of cases in our study. Venturoli et al⁶ reports PCOS to be cause of irregular menses in one third (33%) of adolescent girls. Cycle regularity was restored with combined oral contraceptive pills. Addition of cyproterone acetate was helpful in presence of hirsutism.

Dysfunctional uterine bleeding (anovulatory type) is common in adolescents⁷. In as many as 95%, abnormal vaginal bleeding is caused by DUB⁸. It is because of immaturity of HPO axis which may take 2 to 5 years for complete maturation⁹. In present study 59.45% cases of menstrual irregularities were found to have DUB. Counselling was done in the absence of menorrhagia. Hickey and Balen¹⁰ also mentions that reassurance of the girls and her parents is the most appropriate management of DUB. Anaemic subjects were treated with haematinics, antifibrinolytics and hormones (OCPs or progestogens). Prolonged hormonal therapy with OCP was avoided as it causes premature

fusion of epiphysis. In cases presenting with oligomenorrhoea, hormonal assay (thyroid function tests and serum prolactin) yielded results in 7 out of 20 cases (1/3rd of cases), 4 had hyperprolactinemia and 3 had hypothyroidism. Hormonal assay should be a part of diagnostic work up of adolescents with menstrual disorders¹⁰.

Primary dysmenorrhoea was presenting complaint in 12 cases. Three cases had problem severe enough to prevent them from going to school. Their sibling and mother also had similar problems. Dickenson also mentions family history of Primary dysmenorrhoea¹¹. Endometriosis was diagnosed by ultrasound in one case of secondary dysmenorrhoea which was treated by removal of endometriotic cyst at laparotomy.

Vaginal discharge was second commonest complaints in 17% cases. All of them had physiological leucorrhoea which responded to counselling and maintenance of hygiene. STIs (Chlamydia, Human papilloma virus and herpes simplex virus infection) is reported in 8 to 27% of adolescent girls in western countries¹². Therefore, gynaecologists should have a high index of suspicion of STIs in this age group.

Ovarian tumours were found in 4%, 2 had simple serous cyst and 2 had dermoid cysts. Sebanti et al² have reported higher incidence of ovarian tumour (15.32%) in their series. Two cases presented with

injury to perineum, due to sexual assault. STI and HIV screening was done in these cases as well as emergency contraception were prescribed.

Three unmarried girls presented with septic abortion due to illegal interference. One required laparotomy for generalised peritonitis. One was admitted in a state of septic shock with ARF and died within few hours of admission. One case of incomplete septic abortion with features of local peritonitis was managed with antibiotics and D&E. In all cases, corrective measures and counselling of the girl and family was done. WHO estimates that 2.5 million adolescents have unsafe abortions annually¹³. It is a complex and challenging issue. We need to create awareness about negative health consequences and socio-economic causes.

Conclusion

Teenage problems need to be dealt with sensitively. Counselling is an integral component of treatment strategies. Safe sex practices, STIs specially HIV and emergency contraception should be included in sex education. At present, adolescent gynaecology remains an area to which increased awareness and greater attention should be given to protect and promote the health of teenagers.

This can perhaps best be done by setting up specialized "Adolescent Gynaecological Clinics".

References:

1. O. Sheil, M. Turner. Adolescent Gynaecology. Progress in Obstetrics and Gynaecology; 12:215-233
2. Diaz, A., Laufer, M.R., Breech, L.L., American Academy of Pediatrics Committee on Adolescence, and American College of Obstetricians and Gynecologists Committee on Adolescent Health Care. Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. Pediatrics. 2006; 118: 2245–2250
3. Goswami Sebanti et al. A Profile of Adolescent girls with Gynaecological Problems. J Obstet Gynecol India 2005; 55(4):353-355
4. Carter, David., Comprehensive Sex Education for Teens Is More Effective than Abstinence AJN, American Journal of Nursing; March 2012 - Volume 112 - Issue 3 - p 15 ; doi: 10.1097/01.NAJ.0000412622.87884

5. Elizabeth M. Saewyc, Lara Leanne Magee and Sandra E. Pettingell., Teenage Pregnancy and Associated Risk Behaviors Among Sexually Abused Adolescents. *Perspectives on Sexual and Reproductive Health*, 2004, :98-105;Volume 36, Number 3, May/June 2004.
6. Venturoli S, Porcu E, Fabbri F, Paradisi R, Ruggieri, Boleli S, Orsini F, Gabbi D, Flanigni C L, menstrual irregularities in adolescents : hormonal pattern and ovarian morphology. *Horm.Res* ,1987;24:269-279
7. Sanifelepo J, Yussman M. Gynaecological problems of Adolescence. In:Lavery J, Sanifelepo J. (eds). *Pediatric and Adolescent Gynaecology* New York Springer-Verlag, 1985;61-3
8. Deligeoroglou E. Dysfunctional Uterine Bleeding. *Ann NY AcadSci* 1997;816:158-64.
9. Falcone T, Desjardins C, Bourque J et al. Dysfunctional Uterine Bleeding in Adolescents. *J Reprod Med* 1994;39:7761-4
10. Martha Hickey ,Adam Balen. Menstrual disorders in adolescence: Investigation and Management. *Human reproduction update* 2003;9(5): 493-504
11. Dickens A. Excessive Menstrual Bleeding and Dysmenorrhoea. *Clin Obstet Gynaecol* 1974; 17:665-659
12. Berry PL, Schubiner H, Giblin PT. Issues in Adolescent Gynaecological Care. *Obstet Gynaecol Clin N Am* 1990; 17(4):837-849