

Research Article

Evaluation of Gynaecological Problems Among Adolescent Girls Attending Gynaecology Out Patient Department in Gauhati Medical College and Hospital

Patar Jagannath¹, Das Bishnu Prasad², Bora Manuj Kumar³

^{1,2}Associate Prof, ³PGT, Department of Obstetrics and Gynaecology, Gauhati Medical College and Hospital, Guwahati, Assam

***Corresponding author**

Dr. Manuj Kumar Bora

Email: drmanujbora@gmail.com

Abstract: The objective is to evaluate the gynaecological problems among unmarried adolescent girls attending the out patient department of Gauhati Medical College, Guwahati. A total of 145 girls (10—19yrs, pregnancy excluded) attending gynaecology OPD were included in this study. A detailed history and physical examination was done. Investigations like haemogram, coagulation profile, hormonal assays, sonography, etc were done as and when required. Menstrual disorders were commonest gynaecological problems (76.5%) followed by vaginal discharge (13.1%) and ovarian tumour (3.45%). Among the menstrual disorders, most common was menorrhagia 37/111 (33.33%), followed by oligomenorrhoea 23/111 (20.72%), dysmenorrhoea 22/111 (19.82%), metrorrhagia 19/111 (17.11%), amenorrhoea 8/111(5.52%), polymenorrhoea 2/111 (1.80%). Dysfunctional uterine bleeding was the commonest cause of adolescence menorrhagia 25/37 (67.57%). Endocrinal abnormalities like hypothyroidism (4cases), hyperprolactinemia (3 cases) were present among 23 cases of oligomenorrhoea. Menstrual disorders are the most common gynaecological problems of adolescents. Adolescent girls suffer from various gynaecological problems which should never be overlooked. By setting up specialized adolescent clinic, specially in public sector hospitals, we can give greater momentum to adolescent gynaecology.

Keywords: adolescence, gynaecological problems, menstrual disorders

INTRODUCTION

The word 'adolescence' is derived from the latin word *adolescere*, which means to grow into maturity. The term *adolescere* was popularized 100 years ago, when G. Stanely Hall used it to describe the second decade of life. It is described as that transitional period of life when the carefree child becomes the responsible adult. WHO defines adolescent as individual in the age group 10-19 yrs. Adolescents belonging to this age group constitute almost one fifth of the world's total population¹. Developmental changes rather than age limits or physical milestones are probably the best marker, as the physical and psychological changes that occur may begin before and continue after this age span. At this period there is marked acceleration of physical and emotional development to which adolescent have to adjust. These changes are mediated by complex neuro-endocrine mechanism, which are sequential and inter-linked. The adolescent girls are highly susceptible to exogenous and endogenous influences at this crucial period.

In this study, an attempt has been made to review the gynaecological problems of the adolescent girls attending gynaecology OPD.

MATERIALS AND METHODS

A total of 145 adolescent girls in the age group of 10 to 19 years attending the gynaecology OPD of Gauhati Medical College, Guwahati between June, 2014 to 31st May, 2015 were included in this study who had fulfilled our inclusion criteria. They were diagnosed clinically, supported by necessary investigations and proper follow-up. A detailed history was taken regarding gynaecological and other associated problems. In addition to general examination, physical examination including height and weight, secondary sexual character, presence of any congenital anomalies were recorded. Investigations like complete blood count, routine urine, blood sugar, coagulogram, hormonal assay (FSH, LH, Prolactin, TSH) and pelvic ultrasound were done, when required.

RESULTS

The present study shows that menstrual disorders 111/145 (76.55%) is the commonest

gynaecological problem in adolescent girls (Table 1). Menstrual disorders observed in this study (Table-2) were in the form of menorrhagia 37/111 (33.33%), oligomenorrhoea 23/111(20.72%), dysmenorrhoea 22/111(19.82%), amenorrhoea 8/111(7.21%), polymenorrhoea 2/111(1.80%). Table 3 shows the incidence of aetiopathological factors responsible for menorrhagia. The present study shows, vaginal discharge was the second gynaecological problem, 19/145 (13.1%). Other gynaecological problems found in this study are ovarian tumour 5/145 (3.45%), acne/hirsutism 4/145(2.76%), traumatic injury to perineum 4/145(2.76%) and labia majora abscess 2/145(1.38%).

DISCUSSION

Present study shows that menstrual disorders are the commonest gynaecological problems (76.55%). Menstrual disorders were commonest problem in studies conducted by Ashok Kumar *et al.*, [2] (50.7%) and Goswami Sebanti *et al* [3](58.06%). Menstrual disorders in adolescent girls are often overlooked[4,5]. Menstrual disorders found in our study are menorrhagia(most common), oligomenorrhoea, dysmenorrhoea, metrorrhagia, amenorrhoea (both primary and secondary) and polymenorrhoea. Among different menstrual disorders menorrhagia was the most common. Out of 111 cases of menstrual disorders, 37 cases (33.33%) had menorrhagia. Similar incidence of menorrhagia (36%) was found in study by Revei-vilk *et al* [6]. Causes of menorrhagia found in our study are shown in the Table-3. DUB was the most common cause of menorrhagia in our study. Out of 37 cases of menorrhagia, 25 cases are diagnosed as DUB, (67.57%). PCOS was the second cause(13.51%). Other three causes found were hypothyroidism (10.81%), fibroid (5.41%) and idiopathic thrombocytopenic purpura (2.70%).

The bleeding pattern in adolescent girls do not always conform to the actual definition of menorrhagia. The menstrual cycle during the adolescence are often irregular, also cycle occurred either very frequently or at prolonged intervals. As such, the cases presenting with excessive bleeding along with this kind of cycle pattern are considered as adolescent menorrhagia in this study. Bleeding patterns among the cases of menorrhagia are shown in the table 4. Most common bleeding pattern is menorrhagia (according to actual definition, i.e. Heavy or prolonged bleeding with regular cycle), incidence being 51.31%. Other pattern were menometrorrhagia (29.73%), metropathia (8.11%) and polymenorrhagia (10.81%). 20 cases (54.05%) presented within 6 month of development of symptoms. Highest incidence of menorrhagia (43.24%) was found in eldest daughter. Out of 37 cases of menorrhagia, 17 cases (45.95%) had duration of flow between 8—15 days, while 15 cases (40.54%) had bleeding upto 7 days

and 5 had (13.51%) bleeding for more than 15 days. Most of the patients with longer duration of flow had symptoms of anaemia. From the present study, it was noted that almost 80% of cases, presented with menorrhagia had haemoglobin level below 9 gm%. In the present study, 25 cases of adolescents with menorrhagia had DUB, 11 cases of Oligomenorrhoea had DUB and 19 cases of metrorrhagia had DUB, thus 55 number of cases had DUB which constitute 49.55% of adolescents presenting with menstrual disorders. 23 cases presented with oligomenorrhoea, incidence being 20.72% among menstrual disorders. Most common cause of oligomenorrhoea was DUB(47.83%). Other causes are PCOS (21.74%), Hypothyroidism (17.39%) and hyperprolactinemia (13.04%). 22 cases presented with dysmenorrhoea, incidence being 19.82% among menstrual disorders. 20 cases were (90.91%) diagnosed as primary dysmenorrhoea and 2 cases were diagnosed as secondary dysmenorrhoea due to endometriosis. 12 nos of cases (54.55%) with dysmenorrhoea are eldest daughter.

In the present study 19 cases(17.11%) presented with metrorrhagia. Aetiology was found to be DUB in all the cases of metrorrhagia. 8 cases were presented as amenorrhoea (7.21%). 4 cases were diagnosed as primary amenorrhoea, out of which 2 cases were mullerian agenesis and 2 cases were diagnosed as imperforate hymen. 4 cases had secondary amenorrhoea, all of which are found to be due to PCOS. Present study shows 2 cases of polymenorrhoea.

From the present study, 15 cases was diagnosed as PCOS, incidence being 10.34% among all patients with gynaecological problems. Table 5 shows that out of 15 cases of adolescents having PCOS, 5 cases presented with menorrhagia (33.33%), 5 cases presented with Oligomenorrhoea (33.33%), 4 cases presented with secondary Amenorrhoea (26.67%), 1 cases presented with acne/hirsutism (6.67%).

In the present study 19 cases presented with vaginal discharge(13.1%), all of which are physiological leucorrhoea, which responded to counselling and maintenance of hygiene. STI (Chlamydia, Human Papilloma Virus, and Herpes Simplex Virus infection) is reported in 8—27% of adolescent girls in western countries[7].

Present study shows 5 cases (3.45%) of ovarian tumour, out of which 2 cases were simple cyst and 3 cases were dermoid for which laparotomy was done. 4 cases (2.76%) were presented with acne/hirsutism. It is the most important change taking place during adolescence[8].

In the present series 4 cases (2.75%) presented with traumatic injury to perineum, all were due to fall.

Present study also shows 2 cases of labia majora abscess(1.3%) , one is secondary to shaving of pubic

hair and the other one is due to scratching with nail.

Table 1:Incidence of different gynaecological problems in adolescent girls:

Type of disorder	No. of case(N=145)	Percentage
1.Menstrual disorders	111	76.55%
2. Vaginal discharge	19	13.10%
3.Ovarian tumour	05	3.45%
4.Acne/Hirsutism	04	2.76%
5.Traumatic injury to perineum	04	2.76%
6.Labia majora abscess	02	1.38%

Table-2: Incidence of different types of menstrual disorders

Type of menstrual disorders	No of cases(N=111)	% among menstrual. Disorders	% among gynaecological disorders
Menorrhagia	37	33.33%	25.52%
Oligomenorrhoea	23	20.72%	15.86%
Dysmenorrhoea	22	19.82%	15.17
Metrorrhagia	19	17.11%	13.1%
Amenorrhoea	8	7.21%	5.52%
Polymenorrhoea	2	1.80%	1.38%

Table-3: Showing the incidence of aetiopathological factors of menorrhagia:

Aetiology	No of cases (N=37)	Percentage
DUB	25	67.57%
PCOS	5	13.51%
Hypothyroidism	4	10.81%
Fibroid	2	5.41%
I.T.P	1	2.70%

Table- 4: Showing the type of bleeding patterns among the cases of menorrhagia:

Type of bleeding pattern	No of cases (N=37)	Percentage
1.Menorrhagia(according to actual definition)	19	51.35%
2.Menometrorrhagia	11	29.73%
3.Metropathia	3	08.11%
4.Polymenorrhagia	4	10.81%

Table-5: Shows the number of adolescents with PCOS and their presentation:

Presentation	No of cases (N=15)	Percentage
Menorrhagia	5	33.33%
Oligomenorrhoea	5	33.33%
Secondary Amenorrhoea	4	26.67%
Acne/hirsutism	1	6.67%

CONCLUSION

Attention to gynaecological disorders during adolescence is getting momentum in recent years all over the world. Almost all gynaecological disorders of adult may have early manifestations or subclinical ailments during the period of adolescence. Hence prompt and adequate attention is to be given while

handling a case of adolescent with gynaecological disorders. The gynaecological problems of adolescence can pose difficulties in diagnosis as well as in management ,not just from the physical nature of the problems, but also from the associated emotional and psychological factors. The adolescents girls are very shy and often hesitate to disclose their problems

regarding their bodily changes. Besides this there is a lack of knowledge and understanding as to what is happening in their bodies at this time. They may be fearful that they are abnormal compared to their sisters and friends, so they may be afraid to confide and to seek advice. Therefore, the adolescent girls with gynaecological problems must be dealt sympathetically, friendly with proper counselling, so that they come forward to communicate their anxieties and problems. To address their divergent problems, establishment of separate adolescent gynaecological clinic will be most encouraging. The aim of such service should be to provide an environment that is friendly and private.

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