

# Gynecological disorders in girls less than 20 years of age

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**Summary :** The gynaecological problems in girls less than 20 years of age, for a period of 2 year were observed. Out of 73 such girls, primary amenorrhoea was found to be the commonest disorder in 38.35% of the cases. Pregnancy related problems were seen in 10.96% of the patients. Infertility was the presenting problem in 4.11% of these young girls. Ovarian enlargements were seen in 10.96% of cases. There were 3 cases of perineal injury. Two of these injuries resulted from attempted sexual assault. Besides this, 5 girls were brought by the police for the medicolegal gynaecological examination as there was no evidence of external injury. Therefore, 7 of these 73 (9.59%) girls were involved in cases of attempted sexual molestation or foul play.

## Introduction

Age group less than 20 years is mainly constituted by the paediatric and adolescent girls. The Gynaecological problems faced by these girls are not rare but may not be recognized or they may not turn up to a gynaecologist because of fear and embarrassment. Fortunately of late the Paediatric and adolescent gynaecology has been given due attention and recognised as separate specialities. Although the gynaecological conditions in these group are far from common, they are not insignificant. This study was undertaken to find out the spectrum of gynaecological problems of the girls less than 20 years of age.

## Materials and Methods

A total of 75 girls under the age of 20 years attending the gynaecological outpatient department and the emergency department of a clinical unit at All India Institute of Medical Sciences Hospital over a period of one year (November, 1994 to October, 1995) were included in the study.

The presenting chief complaints were identified and the cases were investigated and managed accordingly. The data thus collected were analyzed.

## Results

The age distribution of the patients varied between 4 and 20 years. Thirteen of these cases were married. The various disorders seen in them are categorized in Table I.

**Table - 1**  
**Gynecological Problems in Girls Less than 20**  
**Years of Age**  
**N=73**

S.No.	Problem	No. of Cases	Percentage
1	Menstrual problem	9	12.33
2	Primary amenorrhoea	28	38.35
3	Pregnancy related	8	10.96
4	Infertility	3	4.11
5	Infection	4	5.48
6	Injury	3	4.11
7	Ovarian Tumors	8	10.96
8	Miscellaneous	5	6.85
9	Medicolegal Cases	5	6.85

## Primary Amenorrhoea

It was the most commonly encountered disorder accounting for 38.35% cases. The various etiological factors are shown in Table II.

### Type II

#### Etiological Factors of Primary Amenorrhoea

(N = 28)

Type	No. of Patients	Percentage
Mullerian Agenesis	12	42.85
Hypogonadotropic		
hypogonadism	8	28.57
Hypergonadotropic		
hypogonadism	5	17.85
Imperforate hymen	2	7.14
Transverse vaginal septum	1	3.57

The commonest cause of primary amenorrhoea was found to be mullerian agenesis (42.85%). All the girls in this group were unmarried. There were two cases of imperforate hymen and one patient of transverse vaginal septum who presented with hematocolpos.

### Menstrual Problems.

Nine girls presented with menstrual problems of various types (Table III). Irregular menstrual cycles were present in 77.78% of the patients. Menorrhagia was encountered in 66.67% of cases. Spasmodic dysmenorrhoea was the presenting complaint in 2 cases.

Table III

#### Patterns of Menstrual Cycles in Girls Less than 20 years of age (N =9)

Pattern of menstrual cycles	No. of Patients	Percentage
Irregular	7	77.78
Regular	2	22.22
Dysmenorrhoea	2	22.22
Menorrhagia	6	66.67
Oligomenorrhoea	1	11.11

## Pregnancy Related Problems

Out of 13 married girls 6 presented with history of amenorrhoea. Of these, 1 was diagnosed to have ectopic pregnancy, one had intrauterine fetal death (Table IV). Two patients came in nonpregnant state for the investigations of their bad obstetric history.

Table - IV

#### Distribution of Pregnancy related Problems (N=8)

Problem	No. of Patients	Percentage
Intrauterine Pregnancy	4	50
Intrauterine Death	1	12.5
Ectopic Pregnancy	1	12.5
Bad Obstetric History	2	25

### Ovarian Tumors.

Ovarian enlargement was observed in 8 patients. The nature of these ovarian tumors is summarized in Table V. The patient of twisted ovarian cyst presented as acute abdomen. Other patients presented mainly with lump in abdomen. A 19 years old girl was reported as immature teratoma on histopathological examination.

Table V

#### Distribution of Ovarian Tumors (N=8)

Nature of Tumor	No. of Patients	Percentage
Twisted Simple Ovarian Cyst	1	12.5
Simple Ovarian Cyst	2	25
Cystadenofibroma	1	12.5
Dermoid Cyst	2	25
Immature Teratoma	1	12.5
Mucinous Cystadenocarcinoma	1	12.5

Vulvovaginitis was seen in 4 patients. Of these, one child

aged 5 years, had labial fusion. The lesion is believed to be the result of mild infection. Another child of 4 years of age presented with pruritus vulva. She was found to have threadworms in the perianal region.

As shown in Table I, there were 3 cases of vulvovaginal injury. Two of these injuries resulted from attempted sexual assault. Five girls were brought by the police for medical gynaeological examination. These girls either left their home or were abducted.

Each patient in miscellaneous group had different problems. One had embryonal rhabdomyosarcoma presented as tumor arising from the broad ligament, another had urinary tract infection, third had urethral stricture, another had seizure disorders and last had worms infestation.

## Discussion

Primary amenorrhoea was the commonest problem amongst girls less than 20 years of age (38.35%). Mullerian agenesis was found to be the commonest cause of primary amenorrhoea (42.85%) in the present study. Rao and Pillai (1991) reported mullerian agenesis in 50% of the cases of primary amenorrhoea. Congenital anomalies of the genital tract may not be detected until menarche. In 3 cases of imperforate hymen and transverse vaginal septum, the anomaly was not detected until 12-14 years of age when patients presented with hematocolpos.

Menstrual problems were observed in 12.33% of the cases. As 45% of girls do not have ovulatory menstrual cycles for 2 years after the menarche (Shiel and Turner, 1996). Irregular menstruation results. Ambiyé & Vaidya (1981) studied 65 girls under the age of 12 years and reported menstrual problems in 11 (16.9%) of them. In the present study, irregular and heavy cycles were ob-

served more frequently. Hegde et al (1990), after interviewing 600 adolescent girls (13-19 years), reported that 21% had either excessive or scanty periods and 39% adolescents have irregular cycles. The hormonal fluctuation in peripubertal period is responsible for irregularity in the menstrual cycles.

Pregnancy is the important cause of mortality and morbidity in adolescence. McAnarney & Hendee (1989) reported that out of 1077124 pregnancies in adolescents, only 47% ended in live births. In the present series, there was one case of intrauterine fetal death and 2 cases of bad obstetric history. One had previous stillbirth and other had two early neonatal deaths due to congenital malformations in the babies. Earlier sexual maturity, early marriage, illiteracy and ignorance about birth control or even normal reproductive physiology are the key factors for the problems faced by these young girls.

Ovarian tumors in childhood and adolescence are rare accounting for 1% of all malignant neoplasm's found in age of 0-17 years (Brine & Maxine, 1977). In the present study, 25% of ovarian enlargements were malignant. Dermoid cyst was the commonest ovarian tumor (40%). In the series of 17 ovarian enlargements in adolescent girls (12 to 20 years), Deshpande et al (1981) found 70.59% as benign, 11.77% as malignant tumors and 17.64% as nonneoplastic enlargements. Tumors of germ cell origin were observed in 47% of cases.

Infertility is an uncommon complaint in young girls. The fact that 3 girls presented with this problem points to the tradition of early marriage in our society. Vulvovaginitis was observed in 5.48% of cases. Vulvovaginitis is a common problem in young girls probably due to lack of estrogenic effect. Non-specific Vulvovaginitis is considered to be secondary to poor perineal hygiene.

Traumatic injury to the vulva and vagina are not rare in young girls. It is caused either due to vehicular accidents, fall, foreign body or sexual molestation and rape. Two thirds of cases in the present series were due to attempted rape. On the other hand, Ambiyee and Vaidya (1981) observed commonest problem as traumatic vulvovaginal injuries (46.8%).

Five cases, in the present study, were brought for medico-legal examination. It is required according to the law, in cases of suspected sexual molestation or foul play.

Early marriage, ignorance about reproductive physiology and social pressure for early conception are probably the key factors responsible for 15.07% of the problems due to pregnancy and infertility. Involvement of 9.59% of girls

in cases of sexual molestation highlights the susceptibility of these young innocent girls towards such type of crimes.

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