

PRIMARY AMENORRHOEA—A CLINICAL AND LAPAROSCOPIC STUDY

by

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Introduction

When menstruation does not start by 18 years of age it is called primary amenorrhoea.

Investigations of a case include detailed history, thorough clinical examination, sex chromosome study and special investigations as histopathological study of endometrium, laparoscopic examination and hormone estimations from plasma/urine when facilities are available.

The present study is evaluation of primary amenorrhoea cases done by studies except hormone estimations.

Material and Methods

Twenty cases of primary amenorrhoea who reported in our Gynaec. unit of Dr. V. M. Medical College and General Hospital, Solapur, from April, 1981 to September, 1985 are included in the present report.

In all these cases a detailed history was

obtained and thorough clinical examination—general, abdominal and local was done. Girls who had under/maldevelopment of external genital organs/uterus but clinically no evidence/suggestion of obvious endocrine disorders were only included in the present study as hormonal estimations are not available in the institution.

Barr-Body count and laparoscopic examination was done in every case and endometrial study when curettage was feasible.

Observations

70% (14) cases were below 20 years of age. External genitals showed normal development for the age in all cases (Table I).

Secondary sex characters were normally developed in 75% (15) cases (Table II).

Barr body count was within normal limits in 16 cases and upto 3% in 4 cases (This includes one case of testicular feminization).

TABLE I
Agewise Distribution

	Below 20	20 to 25	26 to 30	Total
No. of cases	14	5	1	20
Percentage	70	25	5	100

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Vagina showed normal development in 9 cases. It was cul de sac i.e. 2-4 cms. deep blind pouch in 10 cases.

TABLE II
Etiological Factors and Other Observations in Cases of Primary Amenorrhoea

Etiological factor	No. of cases	%	Sexual development		Condition of vagina		Cul de sac
			Normal	Poor	Normal	Septate	
I. Endometrial tuberculosis	1	5	1	—	1	—	—
II. Both/One ovary normal looking with mullerian dysgenesis	11	55	9	2	5	1	5
III. Gonadal agenesis or streak like gonads on both sides with Mullerian dysgenesis/agenesis	7	35	5	2	2	—	5
IV. Testicular Feminization	1	5	—	1	1	—	—
Total	20	100	15 (75%)	5 (25%)	9 (45%)	1 (5%)	10 (50%)

One patient had a transverse septum in the vagina at the junction of lower 1/3 and upper 2/3. At laparoscopy both ovaries looked normal and uterus showed hypoplasia. The septum was excised. It was 1.5 cms. in thickness. Patient was put on cyclic hormone therapy for 3 months after which scanty menstruation occurred.

Table II shows various etiological factors in the cases studied.

In one case endometrial tuberculosis was diagnosed by histopathological and cultural examination of the endometrium. At laparoscopy both ovaries looked normal and uterus was little smaller than normal. One case was a testicular feminization syndrome. Laparoscopic examination re-

vealed ovarian and/or mullerian agenesis/dysgenesis in remaining 18 cases (including that of septate vagina). Ovaries looked normal on both sides in 8 cases. In 2 cases one ovary was normal while the ovary on other side was streak like/not seen. In one case one ovary was normal while other was enlarged to double the normal size and showed multiple cysts and bands of adhesions around and in D.P.

In 5 cases both ovaries were streak like and in 2 cases they were not seen at all.

Table III shows type of mullerian agenesis/dysgenesis in the above 18 cases. Out of these 18 cases uterus was hypoplastic in 4 cases and infantile or rudimentary in 13 cases and replaced by a fibrous band

TABLE III
Mullerian Dysgenesis/Agenesis

Type	Unilateral Mullerian dysgenesis	Bilateral Mullerian dysgenesis	Mullerian Agenesis	Total
No.	4	13	1	18

in 1 case (agenesis). Out of 20 cases, in 1 case there was ovarian agenesis as well as mullerian agenesis. However, vagina showed normal development ending in a blind pouch.

In 4 cases only fimbria and ostium was seen in one/both sides and tubes were replaced by peritoneal folds.

Discussion

In the present study 1 out of 20 cases (5%) of primary amenorrhoea was associated with chromosomal anomaly (Testicular feminization) and in 1 case (5%) tuberculous endometritis was diagnosed. However, the commonest cause was ovarian/mullerian developmental defect.

The development of female genitalia mainly consists in the fusion of the two mullerian ducts and their hypertrophy and canalization. The process may be arrested at any stage resulting in maldevelopments as aplasia, hypoplasia, etc.

While examination of external genitalia

and bimanual vaginal/rectal examination is inconclusive, laparoscopy helps to see the defects in the development and subsequent proper advise can be given to the patient. Laparoscopy has been thus found very useful in study of primary amenorrhoea cases.

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Reference

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