LAPAROSCOPIC EVALUATION OF CASES OF PRIMARY AMENORRHOEA

RITA SINHA ● PRAGYA MISHRA ● MANJU GITA MISHRA

SUMMARY

82 patients with primary amenorrhoea were thoroughly investigated. Main cause of primary amenorrhoea was due to mullerian tract anomalies (39.03%). In 28.04% the cause was gonadal failure, 10.98% had pituitary failure, 15.35% hypothalamic pituitary ovarian dysfunction and 6.10% had end organ failure. Laparoscopy was found to be a useful investigative diagnostic tool in these patients.

INTRODUCTION

Primary amenorrhoea is defined as the failure of menses to appear initially. The evaluation of a patient with primary amenorrhoea is indicated if she has reached the age of 16 without menarche. The hallmark of the adolescent years is the initiation and completion of the pubertal process. Menarche the initiation of regular menstrual cycles signals an uneventful completion of the pubertal process.

Amenorrhoea is a symptom of a great variety of difficulties from organic brain disease to aberrations in the reproductive tract. It is therefore necessary to undertake extensive tests and examinations in order to make a correct etiologic diagnosis.

Dept. of Obst. & Gyn. PMCH, Patna.
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MATERIAL AND METHOD

Eighty-two patients with primary amenorrhoea attending the Gynaecological and Obstetric Department of P.M.C.H., Patna and also some private clinics of Patna from 1988 to 1992 were evaluated. A detailed history of the patients was taken. After clinical examination, these cases thoroughly investigated with special emphasis on sexual

development, skeletal deformities, stature and other parameters. In more than 80% of the cases laparoscopic investigations were undertaken. Other investigations like ultrasonography, and intravenous pyelography were also performed. After the clinical examination these cases were submitted to an extensive endocrine study including estimations of T3, T4 levels, FSH, LH and Prolactin level, 17 KS, DH, EAS level were estimated. Wherever necessary an x-ray of the skull was undertaken.

OBSERVATIONS AND RESULTS

Majority of cases (43.90%) presented between 15 to 17 years followed by 26.33% in the age group 17 to 19. 81.71% of the patients reported before the age of 19.

The height of 17 patients was below 140 cms., 3 patient out of 4 having a height exceeding 160 cms., were found to have a 46 XY Karyotype.

Mullerian Tract Anomalies : Congenital abnormalities of the uterus due to failure of fusion of the mullerian duets were present in 32 (39.03%) cases. Of these patients complete absence of the uterus, the Rokitansky-Kustner-Hauser Syndrome was present in 11 cases. In this syndrome the external genitalia and length of vagina was generally normal, but there was no cervix palpable on vaginal examination. In these cases at laparoscopy there was a nodule of tissue representing the uterus and typical cruciate formation of the round and uterosacral ligaments. Normal adnexae were present. Out of these patients 4 had no vagina and 2 had no uterus, but normal vagina.

13 patients (40.62%) with primary amenorrhoea had normal uterus normal ovary, but agenesis in the upper vagina.

Table II

Showing height of patients

Height in cms.	No. of cases
120 - 130 or below	7
130 - 140	10
140 - 150	38
150 - 160	23
160 and above	4
Total	82

Table I

Showing age and marital status of patients

Age in years	No. of cases	Percentage	Unmarried	Married
Less than 15	9	10.98	8	1
15 - 17	36	43.90	29	7
17 - 19	22	26.83	12	10
19 - 21	12	14.63	3	9
Above 21	3	3.66	1	2
Total	82	100.00	53	29

Table III

Etiological group

Etiological group	No. of patients	%
Mullerian tract anomalies	32	39.03
Gonadal failure	23	28.04
Pituitary failure	9	10.98
Hypothalamic pituitary ovarian dysfunction	13	15.85
End organ failure	5	6.10
Total	82	100.00

Table IV

Karyotype

Karyotype	No. of patients	%
46, XY	6	
45, X	4	
45, X/46, XX	2	18.3
45, X/46, XX inre (Xql)	1	
46, Xl (Xq)	1	
46, XXq 22	1	
46, XX	67	81.7
Total	82	100.0

Table V

Dysmorphic features

Features	No.
Short neck	9
Finger toe anomalies	14
Masculine features	4
Neck web	4
Pectus excavatum	3
Wide carrying angle	2
Squint	3
Nystagmus	2
Cytomegaly	1
Cubetus valgon	2

Of these patients 7 had complete agenesis and 6 had partial agenesis (Transverse septum 2 and imperforated hymen 4). 8 patients had hypoplastic and unicornuate uterus.

Gonadal failure : Incidence of gonadal failure in our series is 28.04%. All the patients were subjected to laparoscopy. Bilateral streak gonads were found in 17, bilateral small gonads in 4 and unilateral small with contralateral streak gonads was found in 2. Seven (30.43%) patients were diagnosed as Turner's syndrome with no ovaries and a small uterus and a characteristic physical appearance karyotype reveaed 45 (x 0).

Incidence of primary gonadal failure in our series is 40.08% In literature the reported incidence is 9.4% (Chandrawati et al 1978 and Gun et al, 1978). More than half of the patients reported to our clinic at or before the age of 18.

67 (81.7%) patients of our series had normal karyotype i.e. 46, XX and rest of them i.e. 18.3% had abnormal karyotype.

More than 50% of the patients had dysmorphic anomalies too. 14 patients had finger toe anomalies and 9 had short neck. 4 cases are found of tuberculosis and was treated with antituberculus drugs.

CONCLUSION

The commonest causes of primary amenorrhoea are anatomical defects and chromosomaly incompetent failure. Laparoscopy and ultrasonography are very useful in investigating patients with primary amenorrhoea.

At least 55.60% patients could be treated with corrective surgery, antituberculus therapy, hormone replacement and gonadectomy. Short stature and non-development of secondary sexual character had already adhered alertness to this group of young girls and their parents taking early medical help. With increasing literacy and great awareness, girls with abnormal puberty are likely to attend clinic early and require to be differentiated from those of delayed puberty.

It is necessary to rule out abnormal karyotype of 46 Xy before instituting therapy for development of secondary sexual character.

REFERENCES

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