

# LAPAROSCOPY AS AN AID IN 100 CASES OF AMENORRHOEA

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## SUMMARY

In the realm of Gynaecology, there is nothing more intriguing and taxing than Amenorrhoea. It may be only a temporary phase in the reproductive epoch of a woman, but it can be part of a more widespread endocrine disorder. In this study hundred cases of primary and secondary Amenorrhoea were studied. It was found that Laproscopy, has been greatest asset in allowing, a better diagnostic evaluation of the patients. It closes the gap between clinical evaluation and surgical exploration.

### Introduction

In recent years there has been a considerable increase in the cases of amenorrhoea, both primary and secondary. Hence it was thought worthwhile, to study cases of amenorrhoea using laparoscopy, which is greatest asset in allowing a better diagnostic evaluation of the patients as quoted "An eye in the pelvis is worth more than two finger in Vagina".

### Material and Methods

A total of 100 subjects were selected for present study, and it was carried out in Zenana Hospital Jaipur. The subjects were grouped as under:

*Group I:* Primary Amenorrhoea comprised 48 cases.

*Group II:* Secondary Amenorrhoea comprised 52 cases.

Any organic pathology were excluded

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in all the patients of Group I and Group II.

Diagnostic laparoscopy was done in usual way under General anaesthesia.

TABLE I  
*Relation to Age*

Age in years	Group I	Group II
15 - 20	16	14
21 - 25	21	23
26 - 30	11	3
31 - 35	—	10
36 - 40	—	2

TABLE II  
*Period of Amenorrhoea in Group-II Cases*

Period of Amenorrhoea	Secondary Amenorrhoea
3 months	1
4-6 months	4
6-12 months	15
1-1½ years	16
1½-2 years	3
3-4 years	3
5-6 years	6
7-10 years	4

TABLE III  
Relating to Secondary Sexual Characters

Secondary Sexual Characters	Primary Amenorrhoea	Secondary Amenorrhoea
Not developed	3	—
Poorly developed	11	4
Well developed	34	48

hypomenorrhoea. Zarate (1970) and Sykes (1972) reported same finding concerning onset of secondary amenorrhoea.

— In cases of amenorrhoea height varied from 140-160 cms., 3 were short statured and 4 were abnormally tall. Weight ranged from 35-60 kg., while 1

TABLE IV  
Laparoscopic Findings in Cases of Amenorrhoea

Laparoscopic Findings	Primary Amenorrhoea	Secondary Amenorrhoea
—Normal pelvic findings	4	26
—Normal pelvic organs with vaginal atresia	1	—
—Mullerian agenesis	1	—
—Mullerian dysgenesis	31	—
—Hypoplasia	1	2
—Streak ovary	4	3
—Genital tuberculosis	5	11
—Stein Leventhal Syndrome	—	1
—Pelvic inflammatory disease	1	6
—Premature menopause	—	1
—Polycystic ovary	—	1
—Asherman Syndrome	—	1

#### Discussion

The results from this study shows that age of majority of cases ranged from 21 to 30 years. Average age incidence was 25 years thus patients seeks early advice which is in accordance with Duignan (1972) Varma (1978) and Sathe (1979).

— Amenorrhoea was more prevalent among higher socio-economic group, because of their increasing awareness and seeking timely advice.

— Duration of secondary amenorrhoea ranged from 3 months to 10 years, with majority (70%) of patients having at least amenorrhoea of 1-2 year of duration. Duignan (1972) reported 18-24 months and 12 months duration respectively. 61% had sudden onset of secondary amenorrhoea, while 30% preceded by oligomenorrhoea and

was underweight and three were obese. Secondary sexual characters were revealed as in Table III.

— All routine investigations were done. Buccal smear was positive in all cases. No abnormality was detected in any case.

— In cases of primary amenorrhoea normal pelvic findings were seen in 4 cases. In 1 case with lower one third of vagina, normal pelvic organs were seen. It is in this case abdomino cervico-perineal vaginoplasty done.

Liston (1972), Varma (1978) show wide variation 2 to 60 per cent in the normalacy of pelvic organs. No organic pathology could be attributed to such a vast percentage of cases by any of the authors.

The main pelvic pathology observed were—mullerian dysgenesis, genital

TABLE V  
Comparative Findings Clinically and Laparoscopy in Cases of Primary Amenorrhoea

Clinical findings	Laparoscopic Findings										
	Uterus								Ovary		
	Absent	Rudimentary Double Horn	Nodule	Smaller than Normal size	Normal size	Absent	normal	Clubbed	Absent	Streak	Normal
<b>VAGINA</b>											
Dimple	1										
Lower one third	32										
Well Developed	15										
<b>UTERUS</b>											
Not felt	32	1	30	—	—	1	1	31	—	—	1 31
Nodule uterus	7	—	—	1	3	3	6	—	1	—	1 6
Smaller than normal size	6	—	—	—	3	3	1	1	4	—	3 3
Normal size	3	—	—	—	—	3	3	—	—	—	— 3

tuberculosis, streak like ovary, hypoplasia, mullerian agenesis with streak like ovary and pelvic inflammatory disease. Thus in 55 per cent of cases incomplete development of mullerian tract was the main pelvic pathology in cases of primary amenorrhoea.

— In cases of secondary amenorrhoea, normal pelvic findings were observed in 26 cases. Duignan (1972) and Sykes (1972) found approximately the same. The main pelvic pathology observed were—genital tuberculosis pelvic inflammation, streak ovary, hypoplasia, premature menopause

Stein-Leventhal syndrome, Asherman's syndrome and polycystic ovary. It was found that genital tuberculosis, is common cause of secondary amenorrhoea.

— Ovarian biopsy was done in both primary and secondary amenorrhoea for histological assessment. Main findings were atretic follicle in 1 case, no follicle, only stroma present in 1 case and majority had normal histology.

— Comparison was done between clinical and laparoscopic findings as shown in Table V and Table VI. It was

TABLE VI  
*Comparative Findings Clinically and Laparoscopy in Cases of Secondary Amenorrhoea*

	Clinical findings	Laparoscopic Findings				
		Nodule	Uterus Smaller than normal size	Normal size	Congestion and Adhesion	Tubes Normal Salpingites
VAGINA						
Normal	52					
UTERUS						
Nodule	3	2	1	—	3	3
Smaller than normal size	23	5	18	—	6	10
Normal size	26	1	—	25	4	19

TABLE VI—Contd.

	Laparoscopic Findings						
	Tubercular	To mass	Normal	Ovary Streak	Atrophic	Cystic	To mass
VAGINA							
Normal							
UTERUS							
Nodule	—	—	3	—	—	—	—
Smaller than normal size	5	4	17	1	2	1	2
Normal size	6	1	23	1	1	1	—

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Normal size	6	1	23	1	1	1	—

found that laparoscopy is superior and can aid to reach in definite diagnosis of the case.

With such a low complication rate, and good results, laparoscopy is the only procedure which can give as much information of the gonads and pelvic contents with such precision. Thus it is a valuable and reliable addition to the gynaecologic diagnostic repertory and important armamentarium of gynaecologist.

#### References

1. Cohen, M. R.: *Obstet. Gynec.* 31: 310, 1968.
2. Duignan, N. M.: *J. Obstet. Gynec. Brit. C'wealth.* 79: 1016, 1967.
3. Liston, A. W. and Bradford, P. W.: *Am. J. Obstet. Gynec.* 113: 672, 1972.
4. Menon, M. K. and Devi, P. K.: *Post Graduate Obstetrics and Gynaecology—2nd Ed., Page 272.* Orient, Longman Ltd., 1982.
5. Sathe, A. V. and Vaidya, P. R.: *J. Obstet. Gynec. India,* 29: 198, 1979.
6. Sykes, D. W. and Ginsburg, J.: *Am. J. Obstet. Gynec.* 112: 408, 1972.
7. Varma, T. R.: *J. Obstet. Gynec. India,* 28: 128, 1978.
8. Zarate, A. and Karchmer, S.: *Am. J. Obstet. Gynec.* 106: 110, 1970.