VAGINAL TUBAL LIGATION—A STUDY OF 184 CASES

by

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Vaginal tubal ligation is a well-established procedure having some advantages over the abdominal tubectomy such as easy acceptance by the patient, less postoperative discomfort, short hospital stay and low morbidity (Population Report, 1973). Various workers are of the opinion that vaginal approach should be preferred over abdominal for patients desiring interval sterilization (McMaster and Ansari, 1971).

When many cases of pelvic abscess/peritonitis, resulting from vaginal tubectomy done at family planning camps or peripheral hospital have been reported, we decided to study the complications of vaginal tubal ligations done at Medical College Hospital, Rohtak Haryana in the last 5 years from April 1972 to March 1977.

Material and Methods

Patients desiring vaginal tubal ligation, who had no pelvic infection on clinical evaluation and preferably were not in the premenstrual phase, were selected for the procedure.

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Out of 184 cases, 78 had interval vaginal tubal ligation (42.5%), 51 (27.7)% had other operative procedures like Manchester repair (28), pelvic floor repair (14), polypectomy and D & C, removal of loop (9) in addition. In 55 (29.8%) patients vaginal tubectomy along with medical termination of pregnancy (suction evacuation) was done. Anaesthesia used was spinal in most of the cases and the procedure was carried out in lithotomy position with head low. All the patients were given antibiotics postoperatively for 5 days—Injection strepto-penicillin or terramycin. Patients were discharged by sixth day. Some cases who were staying in Rohtak itself, had some paramedical/medical aid near by, were sent away even on third day.

Results

Factors of age, parity, choice of operative procedure, stay in hospital, and complications were analysed.

1. *Age*: Age ranged from 20 to 45 years and maximum patients (64.1%) were in 26-35 years age group.

2. *Parity* ranged from 2 to 14, mean being 5.01. In 62.0% parity was between 3 to 5, in 26% between 6 and 8, and only 6.52% were para 2, 5.43% being above para 8.

3. *Anaesthesia* used was spinal in

79.3%, general in 15.2%, epidural in 3.8% and 1.6% had general anaesthesia in addition to spinal as latter was unsuccessful.

4. Madlener's operation was done in 55% and the remaining had modified Pomeroy's technique.

5. *Stay in hospital:* 27% of patients who had interval vaginal tubectomy or MTP in addition went home by third day, and 58% were discharged by seventh day, only 15% in either group stayed more than a week. In patients who had concomitant surgery along with vaginal tubectomy, stay was 7 days for 25.5% only. Average stay for interval tubal ligation (5.5 days) was same as for MTP with tubectomy (5.3 days), being 10.3 days for patients with concomitant surgery.

6. *Complications:* In 91% patients with interval vaginal tubectomy, and 91.9% of MTP with tubectomy had no complications (Table I). In cases with concomitant surgery, 51 per cent had no complication, the increased incidence of morbidity in this group being due to the associated surgery rather than to the tubectomy itself. No case had any serious complication and there was no mortality.

Hemorrhage during operation or later was not encountered in any patient, although it was an observation that there was more bleeding during tubectomy with MTP rather than tubectomy alone. Fever was the commonest complication in this study, incidence being 3.8% and 5.4% in tubectomy only and MTP tubectomy cases respectively. Vaginal sepsis was seen in 1 case of interval vaginal tubectomy. One case with MTP tubectomy had rectal injury which was tepaired with no later problems.

Anaesthesia complications in the form of spinal headache were seen in 4 cases of MTP tubectomy and 3 of interval vaginal tubectomy. In 1 case of interval vaginal tubal ligation, there was difficulty in opening the pouch of Douglas and the procedure was abandoned and abdominal tubectomy was done. One patient of vaginal tubectomy with MTP, who lost her 12 years old son in an accident had tubectomy failure and she delivered a male baby recently.

Comment

Vaginal tubectomy with MTP as well as interval vaginal tubectomy have 9% incidence of complications which is in accord with the observation of Hulka and

TABLE I
Complications in Vaginal Tubal Ligation

Complications	Interval tubal ligation (78 cases)		Tubectomy with MTP (55 cases)		Tubectomy with conc. surgery (51 cases)	
	No.	%	No.	%	No.	%
Fever	3	3.84	3	5.45	17	33.3
Vaginal sepsis	1	1.28	0	0	5	9.8
Rectal injury	0	0	1	1.82	0	0
Anaesth. compli.	3	3.84	4	7.37	2	4.0
Urinary tract infection	2	2.56	0		10	19.6
Failure	0	0	1	1.82	0	0
Total:	7	8.97	5	9.19	25	49.0
No complications	71	91.03	50	91.9	26	51

Omram (1972) who found a range of 3.3 to 13.3% upon review of literature. Sen Gupta, *et al* (1976) also reported 9% morbidity in their series. Morbidity rate between 11 to 26% have been reported by many authors (Boyson and McRae 1949; Ansari and McMaster 1971; Roe *et al*, 1972, Akhtar, 1973; Randhawa, 1978). Achari *et al* (1977) and Rao (1977) reported that MTP with vaginal tubectomy is associated with 3 times more complications, mainly sepsis as compared to MTP with abdominal tubectomy. However, in the present study, we found no increase in stay in hospital as well as morbidity rate by addition of MTP to tubectomy although other procedures like Manchester repair increased the stay as well as morbidity. Interval vaginal tubectomy was associated with least complication when we compared these patients to abdominal tubectomy done in post-partum, interval or along with MTP.

Summary

Study of 184 vaginal tubal ligations done at Medical College Hospital Rohtak, Haryana was carried out. 42.5% had interval vaginal tubectomy, 29.8% had MTP with tubectomy and 27.7% cases had concomitant surgery in addition. Incidence of complication in these groups was 8.9%, 9.1% and 49% respectively, vaginal sepsis rate being 0%, 1.28% and 9.8% respectively. Tubectomy was not associated with any serious complication and there was 1 case of failure in this study. Vaginal tubectomy is safe and advantageous with minimum risk provided it is performed in carefully selected patients.

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