

ECTOPIC PREGNANCY FOLLOWING TUBAL STERILISATION

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SUMMARY

In a study of 235 cases of Ectopic Gestation during a 11 year period, 30 patients were found to have had previous tubal sterilisation. 28 cases had sterilisation operation either in a private nursing home or in a peripheral hospital. 2 cases had tubectomy in hospital. None of the cases followed a previous laparoscopic sterilisation in this series. A higher incidence of ectopic gestation was found following puerperal sterilisation and in the distal position of the divided tube.

Material and Methods

There were 235 cases of ectopic gestation during a 11 year period from January 1976 to December, 1986, when 42,037 deliveries took place.

Observations

The incidence of ectopic gestation in our series is 1 in 178 births. There were 30 patients who had prior tubal sterilisation. All the patients were multiparous and were above the age of 30 years.

TABLE I
Shows the Time of Sterilisation

Time	No. of Cases	Percentage
Puerperal	23	76.7
Interval	5	16.7
Along with M.T.P.	2	6.6
	30	100

This shows a higher incidence of ectopic

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pregnancy following puerperal sterilisation.

TABLE II
Time Interval Between Sterilisation and Ectopic Gestation

Time in years	No. of Cases	Percentage
Less than 2 years	4	13.3
2-5	20	66.7
6-10	6	20
	30	100

In 66.7% of cases, ectopic gestation occurred between 2-5 years, 13.3% in less than 2 years and 20% between 6-10 years after tubectomy.

20 patients presented with typical symptoms of amenorrhoea, pain and spotting or bleeding and rest 10 patients with atypical symptoms. The atypical cases were mistaken for tubal mass when there was a pelvic mass with tenderness; dysfunctional uterine bleeding when they came with irregular bleeding following a

period of amenorrhoea varying from 35-60 days.

Laparotomy was carried out in all these cases, in 25 cases as an emergency and in 15 cases as an elective procedure.

In 25 cases (86.7%) pregnancy was found in the distal portion of the divided tube and 13.3% in the proximal segment. In 22 cases previous tubal ligation was performed at the ampullary part and in 8 cases it was in the isthmic part of the tube.

Total salpingectomy was performed on the affected side in 28 cases. Along with salpingectomy, oophorectomy was performed in 6 cases as the ovary was adherent to the ectopic gestation. There were 5 cases of chronic ectopic gestation and in 2 cases, a total hysterectomy was undertaken along with clearing the ectopic mass as the opposite tube was the seat of chronic infection with adhesions. All these 30 patients had uneventful post-operative recovery.

Discussion

As a result of massive tubal ligation programme, there is a definite risk of pelvic inflammatory disease and ectopic gestation. It may be due to the reunion of the cut ends of the Fallopian tubes (Bhasin and Hingorani 1969 and Chakravarthy 1975). Taly and Gupte reported 12 cases (8.56%) out of 140 ectopic gestations. Harelson *et al* (1973) reported 5 cases out of 96, Paul *et al* (1977) 7 cases out of 100 consecutive ectopic gestation following tubal ligation. Our incidence is found to be high (12.7%).

It was postulated that possible pathogenesis of pregnancy in the distal seg-

ment, could be recanalisation with a narrow lumen, which allowed the passage of sperm but not the fertilised ovum. Same was observed by Chakravathi *et al*, Philips (1976) has reported tubo-ovarian adhesions as the cause.

In our series, 86.7% (26 cases) of the ectopic gestation had occurred in the distal segment of the ligated tube. Implantation proximal to the operation site (in 4 cases) suggests tubo-peritoneal fistula through which ova pass, get fertilised but cannot reach uterine cavity, due to tubal kinking.

Conclusion

The diagnosis of ectopic pregnancy may be delayed on account of previous history of sterilisation. Therefore one should not overlook the possibility of a fertilised ovum getting implanted in a tube subjected to surgery.

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