

## EVALUATION OF SURGERY IN PATHOLOGICALLY DAMAGED OVIDUCT

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### SUMMARY

Tubal Surgery in infertile women with pathologically damaged tubes has got its limitations. Not only surgery is not possible in every case, results are also not satisfactory all over the world. 25 cases who underwent laparotomy for tubal surgery from 1985-1991 in our hospital were retrospectively analysed with the purpose of finding the role of surgery. In 3 women, tubes were found to be irreparably damaged on laparotomy and hence the operation was unnecessary. In the rest 22 cases, only 3 with salpingolysis conceived (13.6%). There was no success with other procedures. From our study we concluded that tubal surgery should be restricted to cases where good prognostic features are present and for other cases, better alternative like IVF should be made widely available.

Serious thought is needed to consider the role of surgery in pathologically damaged tubes for the purpose of restoring its reproductive function in infertile women. Tubal surgery success rate for the last 20 years has been static with no signs of improvement in the future (Brownwich et al, 1988) and hence the controversy regarding its role.

### MATERIAL AND METHODS

Twenty five infertile women with patho-

logically and damaged fallopian tubes who underwent laparotomy for tubal surgery from 1985-1991 at Maulana Azad Medical College and Associated Lok Nayak Jai Prakash Narain Hospital, New Delhi, were retrospectively analysed with the purpose of finding the role of surgery.

Age distribution, type and duration of infertility are shown in Table I.

In 3 cases, on laparotomy both the tubes were found irreparably damaged and hence tuboplasty was not possible. In the rest of the women (22 cases), depending on the site of pathology, various surgical procedures like

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salpingolysis, cuff salpingostomy, fimbrioplasty, end-to-end anastomosis and cornual implantation were carried out. Though the procedure was naked eye, the principles of microsurgery were adopted along with fine instruments.

### RESULTS

Only 3 women out of 22 conceived (13.6%, Table II). Rest were advised second look laparoscopy or H. S. G. on follow up 9 women agreed for further evaluation, 5 of them underwent second look laparoscopy and 4 had hysterosalpingography (results shown in Table III).

### DISCUSSION

About 30-40% of infertile women have

tubal dysfunction. The surgical outcome for pathologically damaged tubes depends largely upon the extent and nature of tubal damage, besides patient's age and duration of infertility. Tubal surgery has no chance of success in women who have bilateral salpingitis, bilateral multiple site obstruction or obstructed tubes with dense pelvic adhesions. Good prognostic features like minimum adhesions, blockage at only one end of the tube, no hydrosalpinx, fimbrial block with minimum dilatation with normal tubal epithelium are present in only 10% of the women with tubal dysfunction (Watson et al, 1990).

In our series, 3 cases were found inoperable (12%). Pregnancies were achieved only with salpingolysis (13.6%) while there was no success

Table I

Distribution of Age, Type & Duration of Infertility

Age (Yrs.)	No. of Patients (25)	Type of Infertility	No. of Patients (25)	Duration of Infertility	No. of Patients (25)
< 20	1 (4%)	Primary	20 (80%)	< 2 Yrs	2 (8%)
21 - 30	19 (76%)	Secondary	5 (20%)	10 - 17 Yrs	22 (88%)
31 - 39	4 (16%)		> 17 Yrs	1 (4%)	
> 40	1 (4%)				

Table II

Successful Cases

No.	Type of Duration of Infertility	Operation	Result
1.	Primary (12 Yrs)	Bilateral Salpingolysis with wedge resection ovary	1st abortion at 3rd month 2nd FTND
2.	Primary (10 Yrs)	Bilateral Salpingolysis	One FTND
3.	Primary (7 Yrs)	Bilateral Salpingolysis	One FTND



Table III

## Re-Evaluation After Surgery

No.	Second Look Laparoscopy	Hysterosalpingography
1.	Bilateral Cuff Salpingostomy - Bilateral Spill	Bilateral Cuff Salpingostomy - Blocked
2.	Bilateral Cuff Salpingostomy - Blocked	Bilateral Cuff Salpingostomy - Blocked
3.	Adhesiolysis - Reformed	Adhesiolysis* - Reformed
4.	Adhesiolysis - Reformed	Unilateral cornual Implantation - Blocked
5.	Unilateral Cornual Implantation - Blocked	—

\* Localised spill seen indicating reformation of adhesions.

with other procedures. Success rates reported in the literature are 25% with salpingolysis (Diamond, 1979), 5% with cuff salpingostomy (Gomel, 1980), and 26% with tubo-uterine implantation (Kistner & Patton 1975). The reason for poor results with procedures other than salpingolysis in our series is probably because all the cases were taken up for surgery without selection.

Even microsurgery is not found helpful in postinflamed damaged tubes (Watson et al 1990). Moreover microsurgery is time consuming and expensive. Therefore if surgery is needed macrosurgery is good enough for a small number of women with good prognostic features and where facility of IVF is not available or cannot be availed of due to various reasons. Dalton and Lilford (1989) and Page and Brazier (1989) have suggested that instead of spending money on microscope, it should rather be utilized for IVF centre to make it widely available.

At present it is being considered that where surgery is indicated, laparoscopic procedures

with carbon dioxide laser is likely to replace laparotomy on grounds of effectiveness, less morbidity and cost (Donnez and Nisolle 1989) while IVF to replace microsurgery on the same grounds. In conclusion, there is a need for a less invasive, more cost effective and easily available method with good success.

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No.	Second Look Laparoscopy	First Look Laparoscopy
1.	Bilateral Cyst	Bilateral Cyst
2.	Bilateral Cyst	Bilateral Cyst
3.	Adhesions	Adhesions
4.	Adhesions	Adhesions
5.	Uterine Cervix	Uterine Cervix
6.	Infestation	Infestation

\* Localized spill seen indicating reversion of adhesion.

with other procedures. Success rates reported in the literature are 25% with salpingostomy (Diamant, 1979), 55% with cuff salpingostomy (Gomel, 1980), and 50% with tubal reanastomosis (Kistner & Patton 1975). The reason for poor results with procedures other than salpingostomy in our series is probably because all the cases were taken up for surgery without selection.

Even micro-surgery is not found helpful in postinfarction damaged tubes (Watson et al 1990). However micro-surgery is time consuming and expensive. Therefore if surgery is needed micro-surgery is good enough for a small number of women with good prognosis. Cases and where facility of IVF is not available or cannot be availed of due to various reasons (Dalton and Lilford (1989) and Page and Bixler (1988) have suggested that instead of spending money on microscope, it should rather be utilized for IVF center to make it widely available.

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