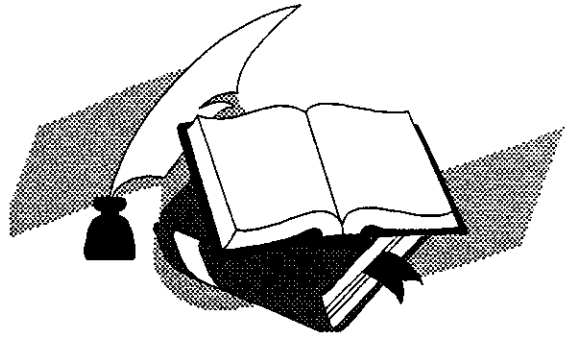
RESULTS



Results

Thirty infertile women with proximal tubal obstruction (P.T.O) were included in this study.

Sixteen of them were complaining of primary infertility and having bilateral tubal obstruction (32 tubes), their mean age was (31.1 y) and duration of infertility was (8.2 y). The other 14 cases were complaining of secondary infertility, 3 of them had bilateral obstruction (6 tubes) and 11 cases had unilateral tubal obstruction (11 tubes) a total of 17 tubes. Their mean age was (33.0 y) and duration of infertility was (6.1 y) as shown in tables (3& 4). Thus, a total of 49 tubes were included in this study.

After the patients had prepared for the procedure of selective osteal salpingography, initially repeated conventional hysterosalpingography (H.S.G) was done prior to the procedure of selective osteal salpingography which revealed patency of 8 tubes (16.3%) with persistence of P.T. O in 41 tubes (83.7%) as shown in table (5). These 41 tubes then subjected to a selective osteal salpingography which revealed patency of 15 tubes (30.6%) and persistence of 26 tubes (53.1%) with P.T.O. as shown in table (6). These 26 tubes were then subjected to further mechanical catheter dilatation that revealed patency of 9 tubes (18.4%) and persistence of P.T.O. in 17 tubes (34.8) as shown in table (7). Wire guide was then a ttempted to these 17 tubes to overcome a further obstrution on the end of the precedure which revealed patency of 7 tubes (14.3%) and persistence of P.T.O. in 10 tubes (20.4%) which failed to be recanalized along the procedure as shwon in table (8).

Conventional H.S.G. was done for all patients at the end of the procedure which conclude patency of 39 tubes (79.6%) and failure of patency in 10 tubes (20.4%) as shown in table (9).

Success rate (patency) at different recanalization procedure was 16.3% on repeated H.S.G. (8 tubes), 30.6% on selective osteal salpingography (15 tubes), 18.4% on tubal catheterization and dilatation (9 tubes), and 14.4% was on wireguide recanalization (7 tubes) as shown in Table (10).

All the 16 cases of primary infertility (had bilateral P.T.O. i.e 32 tubes) 10 cases showed bilateral patency (20 tubes), 2 cases showed bilateral failure (4 tubes). The other 4 cases showed unilateral patency (4 tubes) with unilateral failure in the epsilateral tubes (4 tubes).

All the 14 cases of secondary infertility (3 cases had bilateral P.T.O. and 11 cases having unilateral P.T.O i.e. 17 tubes), 2 cases of bilateral P.T.O. showed patency (4 tubes) while the other case of bilateral P.T.O. showed, failure of patency (2 tubes) and the 11 cases of unilateral P.T.O. showed patency (11 tubes).

Four complications were reported along the 49 studied tubes, 2 tubal perforations on attempting wire guide recanalization, one case suffers of vaso-vagal attack on introducing the uterine cannula and elevation of the temperature to 38 °C with lower abdominal tenderness is observed in one case as shown in table (11).

Table (1):

Distribution of the studied groups (16 cases of primary infertility&14 cases of secondary infertility) according to history of previous pelvic surgery.

Primary infertility			Secondary infertility		
Type of surgery	No.	%	Type of surgery	No.	%
Appendicectomy	3	18.0	Appendicectomy	1	7.1
Ovarian cystectomy	2	12.5	Unilateral salpingectomy	2	14.3
Wedge resection	1	6.3	Caesarean section	4	28.6

Table (2) :

Outcome of previous pregnancies & types of contraception used among cases of secondary infertility included in this study (14 cases).

Outcome of previous pregnancies		
Type	No.	%
- Ectopic pregnancy	2	14.3
- Abortion	2	14.3
- Vaginal delivery	6	42.9
- Caesarean section	4	28.6
Type of contraception		
Type	No.	%
- Oral pills	4	28.6
- I.U.C. D	5	35.7

Table (3):

Mean and standard deviation of ages & duration of infertility among the studied groups.

Type of infertility	Number of cases	Mean & standard deviation of Age (y)		Mean & standard deviation of duration of infertility (y)	
		$\bar{X}$	± S.D.	$\bar{X}$	± S.D
primary	16	31.1	± 5.1	8.2	± 4.3
Secondary	14	33.0	± 4.5	6.1	± 3.1

Table (4) :

Distribution of the studied groups according to number of blocked tubes.

Type of infertility	Unilateral		Bilateral	
	No	%	No	%
Primary	0	0	16	100.0
secondary	11	78.6	3	21.4
Total	11	22.5	38	77.6

Table (5) :

Condition of the tubes among the studied groups before and after repeated hysterosalpingography "H.S.G."

Condition of the tubes	Before		After		Patency	
	No	%	No	%	No	%
P.T.O	49	100.0	41	83.7	8	16.3

P.T.O = Proximal tubal obstruction.

Table (6) :

Results of selective salpingography among the remaining blocked tubes after repeated H. S.G.

Befor		After		Patency	
No	%	No	%	No	%
41	83.7	26	53.1	15	30.6

Table (7) :

Results of tubal catheterization and dilatation among the remaining blocked tubes after selective salpingography.

Before		After		Patency	
No	%	No	%	No	%
26	53.1	17	34.8	9	18.4

Table (8) :

Results of wireguide canalization among the remaining blocked tubes after catheterization and dilatation.

Before		After		Patency	
No	%	No	%	No	%
17	34.8	10	20.4	7	14.3

Table (9):

Results of post procedure H.S.G. among all the studied tubes.

No. of blocked tubes		**Patency on post-procedure H.S.G.**		**Failure of patency**	
No	%	No	%	No	%
49	100.0	39	79.6	10	20.4

Table (10):

Success rates (Patency) at different recanalization procedures.

Recanalization procedures	Repeate H.S.G.	Selective salpingography	Tubal catheterization & dilatation	wireguide recanalization	Post procedure H.S.G.
Success rate	16.3%	30.6%	18.4%	14.3	79.6%

Table (11) :

Complications of the recanalization procedure among the studied groups.

Type of infertility / Complication	Primary		Secondary	
	No.	%	No.	%
Perforation	1	6.3	1	7.1
Peritonitis	0	0	1	7.1
Vasovagal attack	1	7.1	0	0

No. of studied tubes with P.T.O. : 49 (100.0%)

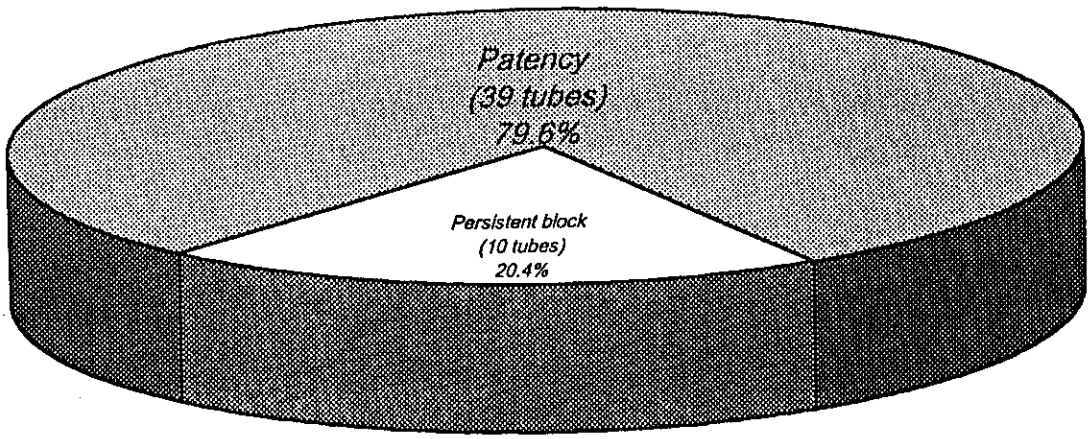


Fig.(1):

Net results of our study.

No of patent tubes :39 (79.6%)

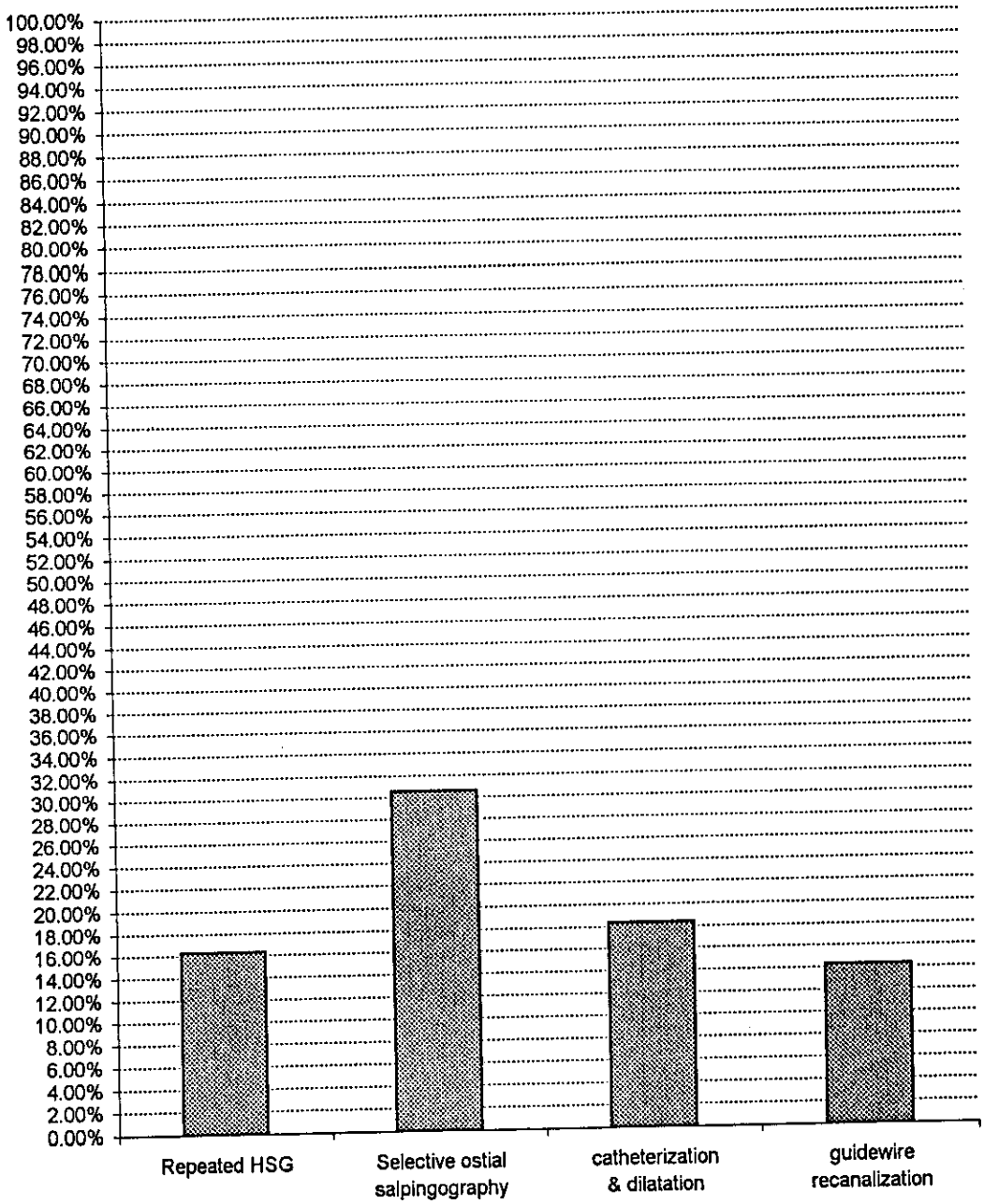
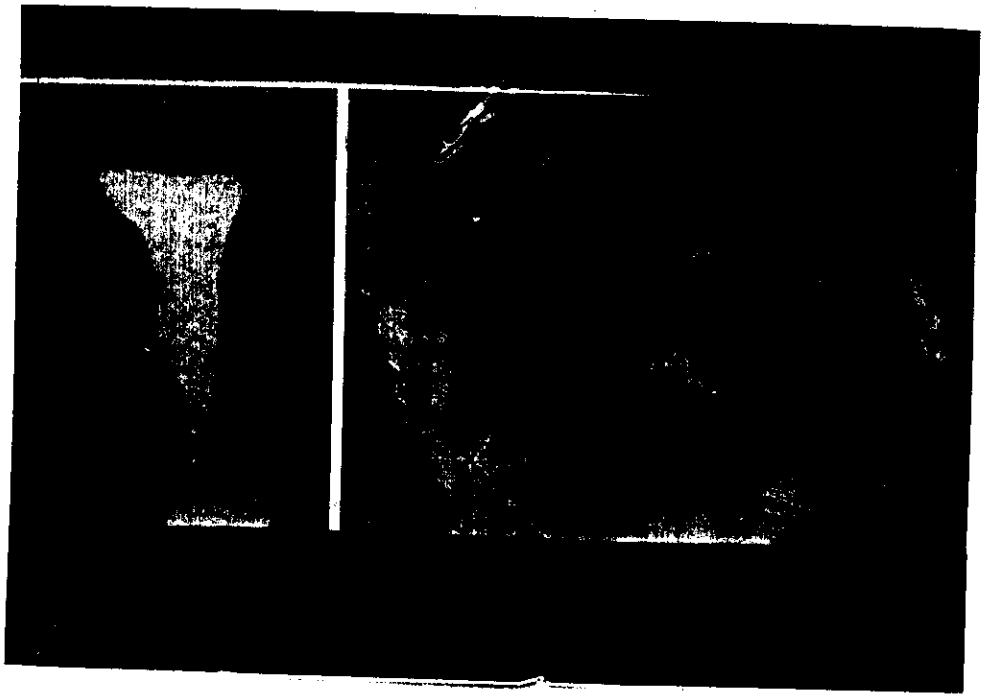


Fig.(2):

Distribution of success rate at different recanalization procedures.



(a) (b)

Fig.(3):

(a) HSG shows bilateral P.T.O.

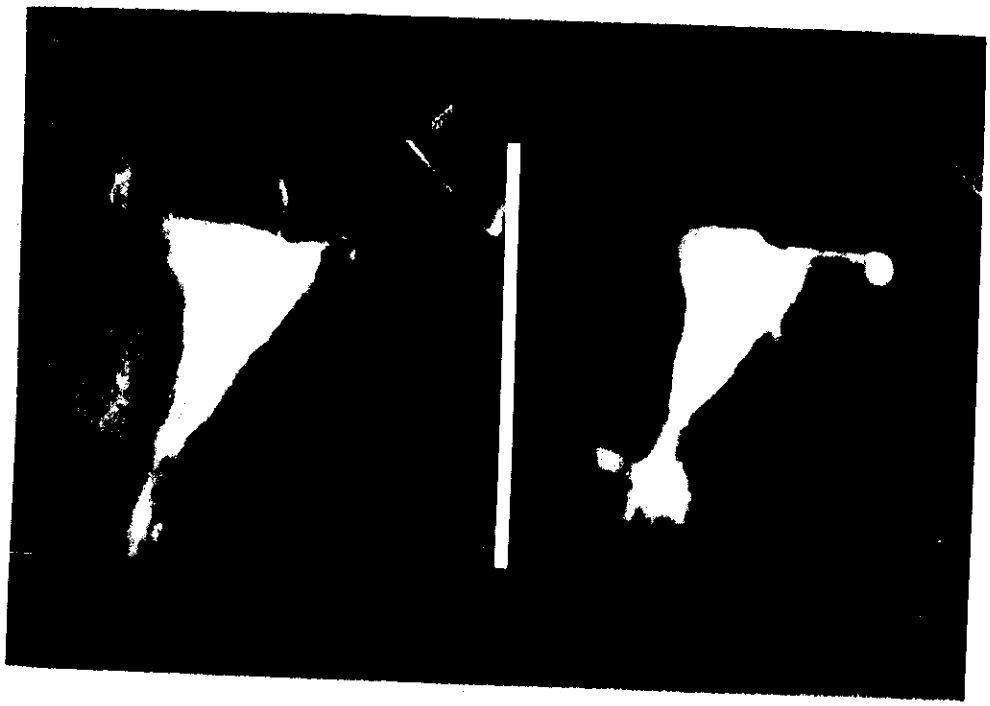
(b) Repeated HSG on attempting for recanalization procedure after administration of antiprostaglandin for 3 days shows patency of both tubes.

(a) (b)

Fig.(4):

(a) HSG shows right P.T.O.

(b) Successful selective salpingography shows patency of the obstructed tube.

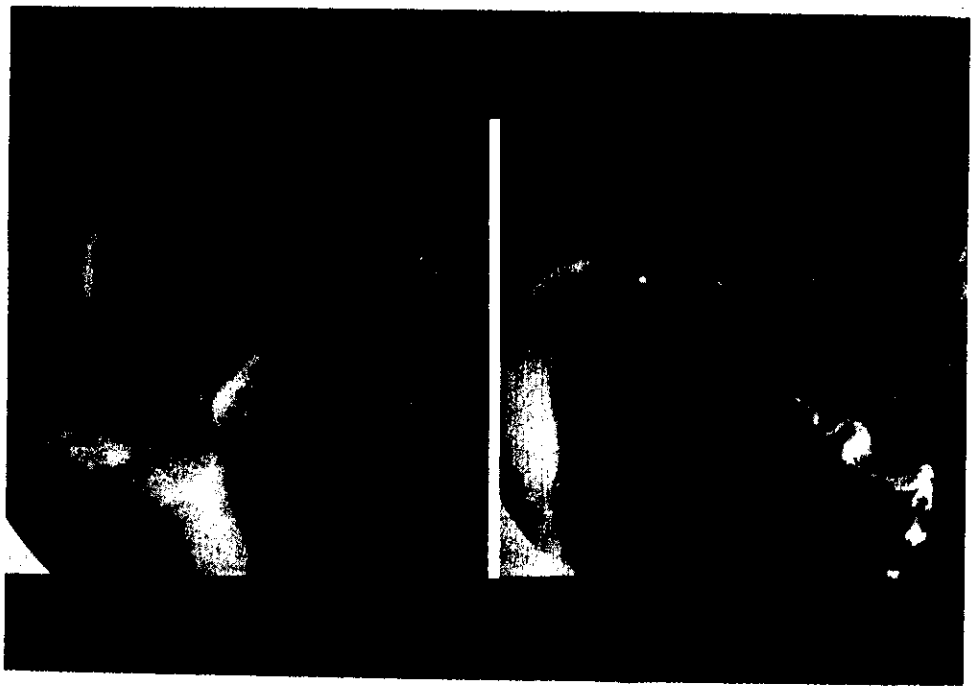


(a) (b)

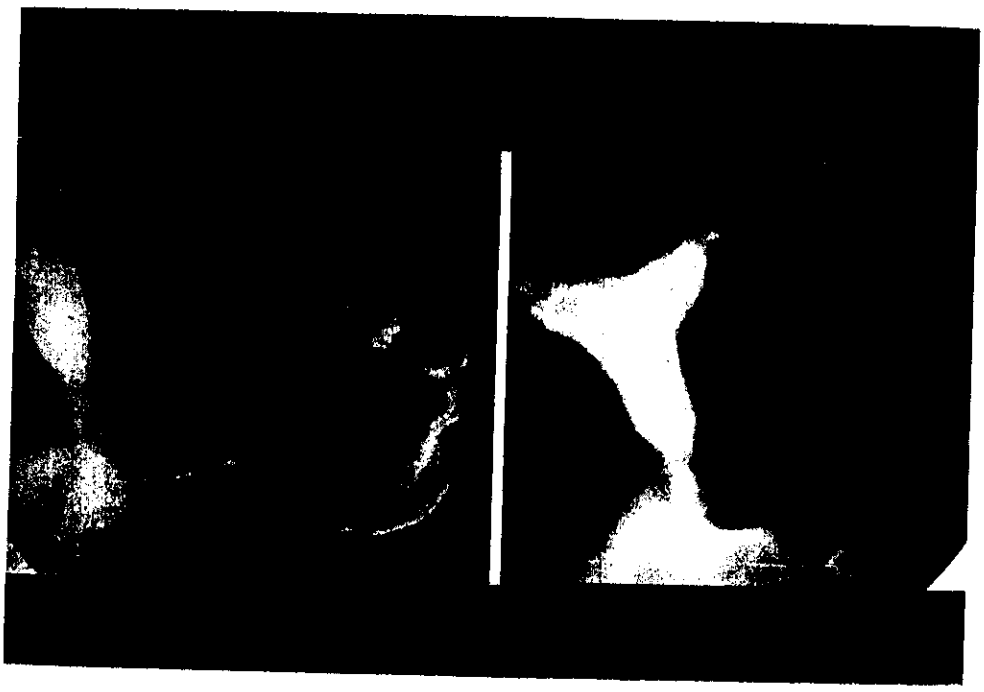
Fig.(5):

(a)HSG shows left P.T.O.

(b)Failed recanalization of the obstructed tube complicated with perforation of the tubal lumen on attempting recanalization by guidewire.



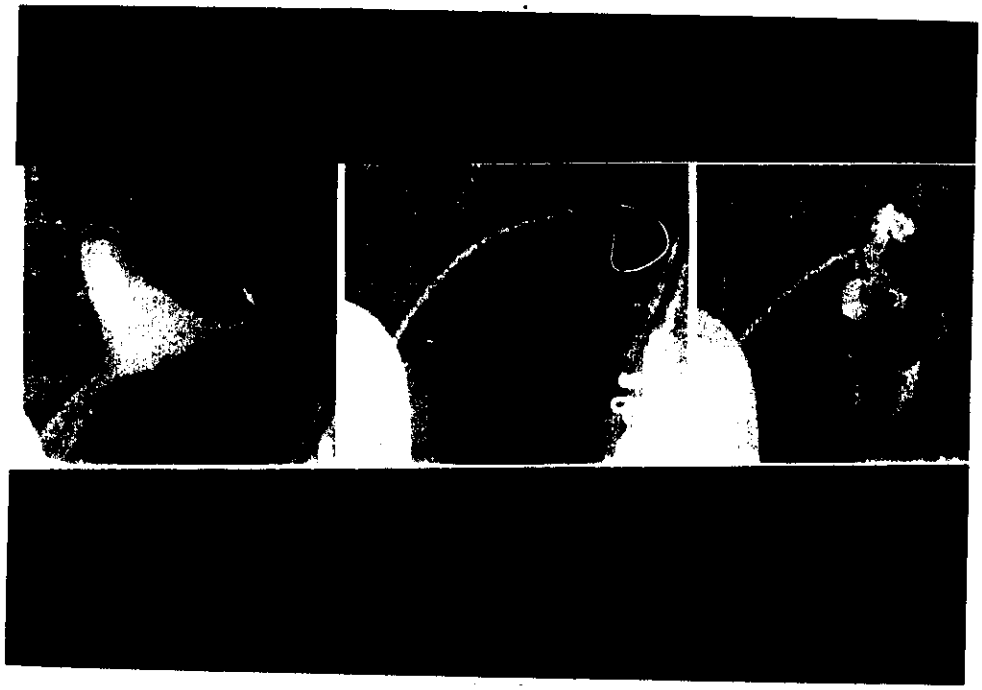
(a) (b)



(c) (d)

Fig.(6):

a) HSG shows left P.T.O.
b) Guidewire was passed through a 5.5 Fr catheter.
c) Good filling of the tube with the contrast after removal of the guidewire.
d) Post-procedure HSG shows patency of the tube.



(a) (b) (c)

Fig.(7):

a) HSG shows bilateral P.T.O.
b) Attempting guidewire through 5.5 Fr catheter on the left tube.
c) Selective ostial salpingography after removal of the guidewire shows patency of the left tube with passage of the contrast through the peritoneal cavity.