

HYSTEROSCOPIC TUBAL CANNULATION FOR WOMEN WITH PROXIMAL FALLOPIAN TUBE OBSTRUCTION: A CROSS-SECTIONAL STUDY

Tamer Hanafy Mahmoud Saied, Yasser Saad El Kassar, Ahmed Shoukry Abdelmonaem Mohamed Rageh, Karim Amr Abdelfattah Mekhimer

Department of Obstetrics and Gynecology, Faculty of Medicine, University of Alexandria

INTRODUCTION

Proximal fallopian tubal blockage is a particularly common etiology of tubal factor infertility. Despite this, there are very limited options for its management. Therefore, rather than just turning to assisted reproductive methods like in-vitro fertilization, numerous attempts have been undertaken to cross beyond this barrier. Modern technology makes it feasible to perform hysteroscopic tubal cannulation during a routine diagnostic endoscopy, which may already be necessary for the patient's infertility workup. In contrast to more widely recognized, costly alternatives, hysteroscopic tubal cannulation might offer patients with proximal tubal obstruction a simple, cost-effective, and safe treatment option.

AIM OF THE WORK

The aim of this study was to assess the feasibility, safety, and effectiveness of hysteroscopic tubal cannulation in cases with documented proximal tubal obstruction and desiring natural fertility.

PATIENT AND METHODS

This cross-sectional study was conducted for 50 eligible women with infertility due to proximal fallopian tube obstruction, diagnosed by means of hysterosalpingography and/or laparoscopic chromopertubation at El Shatby Maternity University Hospital after approval by the local Ethical Committee of Alexandria Faculty of Medicine and having informed written consent for every female included in the study.

In the current study, tubal cannulation was performed by combining a diagnostic laparoscope with hysteroscopic guidance of a cannula, namely, a size 3 French double J ureteric catheter, into the ostium of the affected tube and performing a novel dye test or selective chromopertubation.

RESULTS

Table 1: Distribution of the studied cases according to demographic and obstetric data (n = 50).

	No.	%
Age (years)		
Min.–Max.	19.0 –36.0	
Mean±SD.	27.68±4.93	
Gravida		
Nulli-gravida	20	40.0
Primi-gravida	19	38.0
Multi-gravida	11	22.0
Parity		
Nulli Parous	29	58.0
Primi Parous	18	36.0
Multi Parous	3	6.0
Previous CS		
No	34	68.0
Yes	16	32.0
Type of infertility		
1ry	29	58.0
2ry	21	42.0
Duration of infertility (years)		
Min.–Max.	1.0 – 7.0	
Mean±SD.	3.59 ± 1.61	

SD: Standard deviation

Table 2: Comparison of details of the procedure of tubal cannulation in cases with successful and failed cannulation (n = 50).

	Success				p
	Failed (n = 16)		Success (n = 34)		
	No.	%	No.	%.	
Guide wire use					
No	10	62.5	23	67.6	0.720
Yes	6	37.5	11	32.4	
Subjective difficulty					
Easy	10	62.5	33	97.1	FEp= 0.003*
Difficult	6	37.5	1	2.9	
Backflow of dye					
No	8	50.0	15	44.1	0.793
Mild	3	18.8	10	29.4	
Moderate	5	31.3	9	26.5	
Operative time (min.)					
Mean±SD.	6.0±2.61		4.35±2.0		0.030*
Median	6.0		4.0		
(Min.–Max.)	(2.0–10.0)		(2.0–10.0)		
Complications					
No	12	75.0	33	97.1	0.031*
Partial perforation and extravasation of dye	1	6.3	0	0.0	
Extravasation in broad ligament	3	18.8	1	2.9	

SD: Standard deviation

FE: Fisher Exact test

p: p value for Relation between Success and different parameters

*: Statistically significant at $p \leq 0.05$

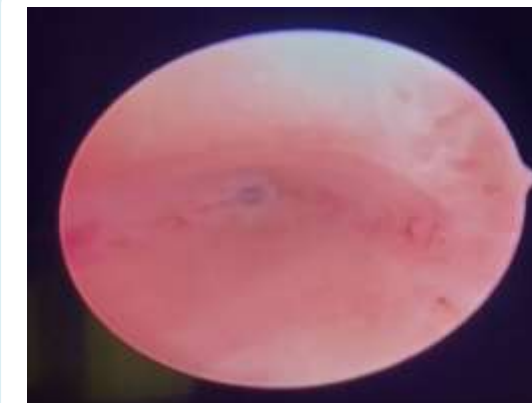


Figure 1



Figure 2

CONCLUSION

- From the current study, we could conclude that hysteroscopic tubal cannulation under direct laparoscopic guidance is an effective management option for patients with proximal tubal obstruction, with a relatively high success rate.
- Additionally, this technique has been proven to be safe due to the infrequent incidence of complications encountered.