

SUMMARY

The present study aimed at evaluating and comparing the effectiveness of hystroscopic and tactile fallopian tube catheterization as diagnostic and therapeutic modalities for infertile women with proximal tubal block.

The study included 50 infertile patients with proximal tubal block selected out of infertile women attending the Infertility Clinic at Obstetrics and Gynecology department, Benha University Hospital. Patients' selection was based on clinical history and examination and pre-procedural hysterosalpingography. Patients enrolled in the study were randomly allocated into two equal study groups (n=25) depending on the modality used for tubal recanalization, tactile group and hystroscopy group.

Patients included in the study had a mean age of 25.3 ± 6.9 years with a mean duration of infertility of 4.3 ± 1.2 years. There were 31 patients (62%) with secondary and 19 (38%) patients with primary infertility with a frequency of secondary to primary infertility of 1.63:1. Out of patients with secondary infertility, 17 patients (54.8%) were on contraception for varied durations; 11 used IUCD, 5 were contraceptive pill consumers and only a woman was on injectable contraception. There were 26 cases (52%) with unilateral tubal obstruction and 24 (48%) women with bilateral tubal obstruction.

The technical success rate in hysteroscopy group, defined as the rate of successful localization of the tubal ostia and engagement of the catheter into it, was 88% with failure of localization of uterotubal ostium in 2 patients; one with unilateral and another with bilateral PTB and failure to direct the catheter into the tubes in another case with bilateral PTB.

The overall success of tubal recanalization confirmed by laparoscopy and visualization of methylene blue dye injected into the tube coming out through the tubal fimbrial end, was reported in 92.3% (24 of 26) of cases with unilateral PTB and in 41.6% (10 of 24) of cases with bilateral PTB and a total success rate of 68%.

In patients underwent tactile tubal recanalization the reported success rate was 92.9% in patients with unilateral PTB while was 27.3% in patients with bilateral PTB, with a significant ($p<0.001$) increase of success rate in cases with unilateral versus those with bilateral PTB and a total procedural success rate was 64%.

In patients underwent hysteroscopic tubal recanalization the reported success rate was 91.7% in patients with unilateral PTB while was 53.8% in patients with bilateral PTB, with a significant ($p<0.001$) increase of success rate in cases with unilateral versus those with bilateral PTB and a total procedural success rate was 72%. The obtained results with the use of hysteroscope, was non-significantly higher than that obtained with tactile catheterization in patients with bilateral PTB.

No technical complications were reported throughout the current study, with a non-significant difference between both tactile and hysteroscopy groups.