

FALLOPOSCOPIC TUBOPLAASTY (FT) NOT ONLY ACHIEVES NATURAL PREGNANCY BUT ALSO IMPROVES SUBSEQUENT PREGNANCY RATE OF IVF-ET BY RECOVERING TUBAL PATENCY

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Purpose: Tubal factor is a major cause of female infertility. Human fallopian tube is vulnerable to pathogenic organisms and often causes infertility by occlusion (Oc) or stenosis (St). FT is the procedure of transcervical balloon tuboplasty combined with retrograde imaging of endotubal lining and can be performed on outpatient basis. Although ART has been used for tubal factor as standard treatment, we apply FT as an initial treatment followed by ART for failures of conventional treatment after FT. The first objective of the present study was to evaluate whether outpatient FT is effective in achieving pregnancy by conventional fertility treatments. The second objective was to determine if tubal patency influences clinical outcomes of IVF-ET.

Materials and Methods: Study 1. Indications for FT were tubal lesions without hydrosalpinges diagnosed by hysterosalpingography. Severe male factor patients were excluded. FT treatments were performed under uterine cervical block.. Eversion balloon catheter of 6 cm was used to recanalize affected oviducts. Patients were followed by conventional treatments such as timed intercourse or IUI for at least six months. Success of FT procedures and subsequent pregnancy were analyzed. Study 2. Pregnancy outcome of ART in 83 patients with impaired bilateral tubal patency was analyzed retrospectively. Forty-nine patients failed to conceive after FT. ART was performed on the 49 patients (bilateral occlusion, 10 patients; occlusion and stenosis, 10 patients; and bilateral stenosis, 29 patients) after FT and 34 patients (bilateral occlusion, 10 patients; occlusion and stenosis, 10 patients; and bilateral stenosis, 29 patients) directly without FT.

Results: Study 1. Nine-hundred-eighty-eight out of 1000 patients (98.8%) were treated successfully with FT. Overall pregnancy rate after FT was 27.1% (268/988). 24.7 percent of patients (170/688) with bilateral tubal lesions (Oc&Oc, 169pt Oc&St, 217pt; and St&St, 302pt.) and 34.8% of patients with unilateral tubal lesion (Oc, 141p;. and St, 140pt.) achieved pregnancy. Six ectopic pregnancies (2.2%) took place. The pregnancy took place in 4 months and 23 days on average after FT. Study 2. The pregnancy rate by ART of the patients with bilateral tubal occlusion after FT (70.0%; 7/10) tended to be higher than without FT (33.3%; 3/9, P=0.1). ART pregnancy rate (33.3%; 3/9) of the patients with bilateral tubal occlusion without FT was significantly lower compared to the patients with at least one tubal patency preserved (75%; 18/24, P<0.05)

Conclusion: FT could be performed on outpatient basis and achieved natural pregnancy (27.1%) with acceptable ectopic pregnancy rate. FT on patients with bilateral tubal occlusion improved pregnancy rate by subsequent ART. The present study has proven not only that outpatient FT could be the first option for tubal factor infertility before IVF, but also that the role of oviduct provides a site for fertilization and embryo migration and an important factor for implantation.