Selective Salpingography And Fallopian Tube Recanalisation

Ham MC, Anushya V, Ouzreiah N, Yeong CH, Kartini R

Universiti Malaya, Malaysia

Purpose of Study: To evaluate the feasibility of selective salpingography (SSG) and fallopian tube recanalisation (FTR) as an alternative treatment for proximal tubal obstruction (PTO) in University Malaya Medical Centre (UMMC) by studying the technical and clinical effectiveness, complication and radiation dose of SSG and FTR. Evaluation of pain intensity during procedure and investigation of the presence of infection was also conducted.

Materials and Method: We conducted a prospective study on 9 patients aged 33.6 3.17 years with the diagnosis of PTO by prior hysterosalpingography between October 2014 to December 2016 in UMMC. FTR under fluoroscopic guidance performed by an experienced interventional radiologist using dedicated FTR kits. Demographic data and procedural details were obtained. Recanalisation rate, post-procedure complication, pregnancy outcomes, pain score, radiation dose and culture and sensitivity results were analysed. Patients were followed up for a period of 4-122 weeks.

Results: A total of 11 procedures including 2 repeated cases (4 unilateral and 7 bilateral) performed. 14/18 tubes were successfully recanalised providing technical success rate per tube of 77.8% and success rate per procedure of 90.9%. Post FTR pregnancy rate was 50%, 2 pregnancy occurred after the procedure was repeated. One live birth was reported. One case of tubal perforation occurred which required no treatment. Seven patients experienced mild discomfort during the procedure. Mean procedure time was 20.3 $\pm$13.6 minutes and the mean fluoroscopic time was 8.6 9.2 minutes. The range of dose area product recorded was 0.11 - 2.92 mGym2. The mean estimated effective dose was 2.63 $\pm$2.42 mSv. No significant bacterial growth found.

Conclusion: SSG and FTR are relatively safe and effective in treating the carefully selected patient diagnosed with PTO with high technical success rate and pregnancy rate at a relatively low cost compared to other invasive and costly reproductive treatment. Radiation dose is within the safe limit.