Case Report

Treatment modality of fallopian tube pathology in infertility

Nikhil Shivdikar[1*], RajShekhar K Yadav[2], Ashok Shivdikar[3]

[1, 2, 3]Department of Obstetrics and Gynaecology, Dr. D. Y. Patil hospital and Research Center, Nerul, Navi Mumbai, Maharashtra, INDIA.
Email: niksisat@gmail.com

Abstract

Abstract: 35 yrs married since 13 years case of secondary infertility for investigated found to be PCR KOCHS and mantoux positive, TORCH IGg and APLA positive, ANA weakly positive. Diagnostic hysteroscopy WNL. endometrial secretory phase. laparoscopic findings B/L beaded appearance, hence B/L fulgaration. medical treatment of lochs and torch titre was done. Primary investigation of infertility (fsh, lh, prl, testesterone, DHEA, insulin, sugar profile, thyroid, AMH) HSA count 20 million, 40% motility, 30% abnormality. Antagonist stimulation for ovary. ovum pick up and ICSI was done. Blastosis transfer was done on day 5. beta hcg and usg positive, low molecular weight heparine given throughout the pregnancy. Twins pregnancy was found ANC period was uneventful Elective LSCS was done at 37 wks of gestation. Post op period uneventful both the babies went home.
Keywords: Secondary infertility, b/l beaded appearance, b/l fulgaration.

[*]**Address for Correspondence:**
Dr. Nikhil Shivdikar, Department of Obstetrics and Gynaecology, Dr. D. Y. Patil hospital and Research Center, Nerul, Navi Mumbai, Maharashtra, INDIA.
Email: niksisat@gmail.com
Received Date: 04/10/2015 Revised Date: 22/11/2015 Accepted Date: 30/12/2015

Access this article online

Quick Response Code:

Website: www.medpulse.in

DOI: 08 December 2015

INTRODUCTION

Infertility is defined as the inability of a couple to achieve conception after 12 months of unprotected coitus of average frequency[1]. In developing countries, infertility rate is said to be 10-20%, while in developed countries it is rated at 5- 15%[2]. Tubal factor accounts for 15-30% of infertility in all women in developing countries with high rates of pelvic inflammatory disease and limited resources[3]. Tuberculosis remains a major health problem in many developing countries including India and in these countries genital tuberculosis is responsible for a significant proportion of women presenting with infertility[4]. It is estimated that 5-10% of infertile women all over the world have genital tuberculosis although this varies from less than 1% in the United States to nearly 18% in India[5]. Fallopian tubes constitute the initial focus of genital tuberculosis in a majority of the cases and tuberculosis has accounted for approximately 5% of all cases of salphingitis in many parts of the world[6, 7]. In genital TB the target organ is fallopian tubes which constitute 90% of cases[6].

CASE REPORT

35 yrs old married since 13 years case of secondary infertility came to Shivdikar infertility clinic with previous history of 5 failed IVF cycles. Patient was investigated for primary infertility investigations. Found to be TB-PCR and Mantoux positive. Patient was diagnosed as fallopian tube tuberculosis 7 yrs back for which received AKT for 9 months. Patient found to be TORCH IgG and APLA positive with ANA weekly positive. For which both husband and wife received rovamycin, dalocin, laridox and rubella vaccine. Diagnostic hystero-laproscopy done. Hysteroscopy WNL, Dnc done endometrium send for histopathology and culture to rule out endometrial tuberculosis. Showed secretory phase of endometrial and negative for endometrial kochs. Laparoscopic findings B/L beaded appearance of fallopian tubes. Hence B/L fulguration done at cornuaisthemic junctions nears the uterus. Husband semen count 20 million, 40% motility, 30% abnormality. Antagonist stimulation was used for

How to site this article: Nikhil Shivdikar, RajShekhar K Yadav, Ashok Shivdikar. Treatment modality of fallopian tube pathology in infertility. *MedPulse – International Medical Journal.* December 2015; 2(12): 883-884. http://www.medpulse.in (accessed 14 December 2015).

stimulating the pateint. Ovum pickup and ICSI was done. Blastocyst transfer was done on day 5 of stimulation cycle. Prednisolone 10mg/day started 3 days prior to ET and 3 days post ET. Beta hcg and USG positive on 15th day of ET. Low molecular weight heparin 40K was given through out the pregnancy. Twin pregnancy was found on USG in ANC period. Cervical encirclage was done, Anamoly scan was WNL. ANC period was uneventful. Elective LSCS was done on 38 wks of gestation. 2. 2kgs and 2. 5kgs male and female healthy babies were delivered. Post operative period was uneventful both the babies with mother went home without complication.

DISCUSSION

Although the frequency of tuberculosis has been reported to have decreased significantly during the last many years as a result of widespread antibiotic treatment, and improved socioeconomic conditions, the female genital tuberculosis and the infertility related to it are much more frequent in third world countries[7]. The average incidence of genital tuberculosis in infertility clinics throughout the world is 5-10% and it varies from 0. 69% in Australia to 17. 4% in India[5]. In 80-90% of the cases of genital TB, the fallopian tubes are harmed. To begin with, small nodules of tubercular material deposit on the surface of the tubes; then, the infection invades the tubes, affecting the internal surface of the tubes. Pus collects within the tubes, blocking them either completely or partially. Distal tubal occlusion may lead to formation of hydrosalpinges, which are found in 10% to 30% of all patients undergoing IVF- ET[8]. Hydrosalpinx is associated with a reduced chance of implantation and increase risk of pregnancy loss. The presence of a hydrosalpinx during an IVF-ET cycle results in significant decreases in implantation rates and pregnancy rates (2. 8% and 8. 5%, respectively) per transfer. Surgical treatment of hydrosalpinges before IVF-ET cycles improves implantation rates and pregnancy rates. Especially patients with hydrosalpinges large enough to be visible on ultrasound are associated with the poorest IVF-ET prognosis[9, 10]. The theories explaining the harmful effect of hydrosalpinges on IVF outcomes

1. A mechanical washout of the transferred embryos through tubouterine reflux of hydrosalpinx fluid.
2. A direct embryotoxic effect even when a low concentration of hydrosalpinx fluid is present in the uterine cavity.
3. A lower endometrial receptivity as an effect of disturbed expression of the cytokine and integrin system by the presence of a hydrosalpinx, thus impairing the implantation potential.

Laparoscopic salpingectomy or proximal tubal occlusion before IVF-ET has been shown to restore IVF-ET outcomes in patients with hydrosalpinges (11–12). So any surgical intervention interrupting the communication between hydrosalpinx and uterine cavity would stop the leakage of hydrosalpinx fluid and would improve the endometrial environment for implantation.

REFERENCES

1. Eskondari N, Cadieux M (2003) Infertility In: Current obstetric and gynaecologic diagnosis and treatment. Ed DeCherney A. H and Nathan L. 9th Edition Lange Medical Books/McGraw-Hill, 979-990
2. Bello TO (2004). Pattern of tubal pathology in infertile women on Hysterosalpingography in Ilorin, Nigeria. Annals Afr. Med. , 3(2) 77-79
3. Hoffman L, Chan K, Smith B, Okolo S (2005). The value of saline salpingography as a surrogate test of tubal patency in low- recourse setting. Int. J. Fertil. Womens Med. 50(3): 135-139
4. Muir DG, Belsey MA. Pelvic inflammatory disease and its consequences in the developing world. Am J Obstet Gynecol 1980; 138:913-28.
5. Schaefer G. Female genital tuberculosis. Clin Obstet Gynecol 1976; 19:223-39.
6. Varma TR. Genital tuberculosis and subsequent fertility. Int J Gynaecol Obstet 1991; 35:1-11.
7. Novak ER, Woodruff JD. Novak's Gynecologic and Obstetric Pathology, 8th edn. Philadelphia. WB Saunders. 1979; 328.
8. Andersen AN, Lindhard A, Loft A, Ziebe S, Andersen CY. The infertile patient with hydrosalpinges. IVF with or without salpingectomy? Hum Reprod 1996; 11:2081–4.
9. De Wit W, Gowrising CJ, Kuik DJ, Lens JW, Schats R. Only hydrosal- pinges visible on ultrasound are associated with reduced implantation and pregnancy rates after in vitro fertilization. Hum Reprod 1998; 13: 1696–701.
10. Strandell A, Lindhard A, Waldenstrom U, Thorburn J. Hydrosalpinx and IVF outcome: cumulative results after salpingectomy in a randomzed controlled trial. Hum Reprod 2001; 16:2403–10.
11. Dechaud H, Daures JP, Amal F, Humeau C, Hedon B. Does previous sal- pingectomy improve implantation and pregnancy rates in patients with severe tubal factor infertility who are undergoing in vitro fertilization? A pilot prospective randomized study. Fertil Steril 1998; 69:1020–5.
12. Johnson NP, Mak W, Sowter MC. Surgical treatment for tubal disease in women due to undergo in vitro fertilisation. Cochrane Database Syst Rev 2004; 3:CD002125.

Source of Support: None Declared
Conflict of Interest: None Declared