

Management of *penn maladu* (female infertility) due to tubal block in Siddha medicine-A case report

Case Report

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Abstract

Women will have a blissful and complete life after having a child. The inability to conceive a child will adversely impact a women's life. Infertility has also been proposed as a major contributor to emotional problems and reduced quality of life. There are many factors causing infertility- ovarian, tubal, cervical and peritoneal factors. Tubal factors account for about 25-30% of female infertility. Tubal block occurs due to sexually transmitted infections, previous abdominal surgeries, past ectopic pregnancy, pelvic inflammatory diseases and pelvic adhesions or endometriosis in which scarring occur inside the lining of fallopian tubes. Siddha medicine plays a vital role in promoting reproductive health in both male and female partners. The medicines act well on clearing the tubal block and restoring the tubal functions. In this case study a Siddha regimen comprising *Aadutheendapalai ennai* and *Pachapashana chenduram* are proven beneficial in treating the tubal block. The study describes about a twenty -five-year old female patient visiting Ayothidoss pandithar Hospital, National Institute of Siddha for the management *Penn maladu* (Female Infertility) due to Tubal block by Siddha medicine. The patient was under treatment for two months. Hysterosalpingography was taken before and after treatment which showed clearance of block on the Right fallopian tube. In Allopathy treatment IVF is suggested for this condition. IVF is proven to be economically costly procedure and the success rate is also low. So this Siddha regimen can be given to the patients for managing female infertility due to tubal block.

Keywords: Female infertility, Tubal block, Ectopic pregnancy.

Introduction

Infertility is a global problem in the field of reproductive health. It is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility affects millions of people – and has an impact on their families and communities. Conception depends on the fertility potential of both male and female partners. The male is directly responsible in about 30-40%, the female in about 40-55% and both are responsible for about 10% of cases. The remaining 10% is unexplained. The causes of female infertility according to International Federation of Obstetrics and Gynaecology (FIGO) includes ovulatory dysfunction (30-40%), Tubal disease (25-35%), Uterine factors(10%), cervical factors (5%),

pelvic endometriosis (1-10%). In the female reproductive system, infertility may be caused by tubal disorders such as blocked fallopian tubes, complications of unsafe abortion, postpartum sepsis or abdominal/pelvic surgery. (1)

Eighty percent of the couples achieve conception if they so desire, within one year of having regular intercourse with adequate frequency (4-5 times a week). Another 10% will achieve the objective by the end of second year. As such 10% remain infertile by second year. Among responsible factors of Female infertility, the tubal blockage is the 2nd highest affecting around 25-35% of population and difficult to treat. Peri-tubal adhesions, previous tubal surgery, salpingitis etc are the common causes of tubal blockage.(2) For young women who have had past tubal sterilization and tubal obstruction, tuboplasty, or tubal microsurgery, is advised. Numerous tuboplasty treatments have been carried out, with successful pregnancy rates ranging from 27% for fimbrial surgery to 50%–60% for isthmic blockage, depending on the location of the block. If a significant hydrosalpinx is producing distal tubal disease, salpingectomy and IVF should be performed. (3) IVF is the last option in couples having infertility

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due to tubal block. But IVF techniques are expensive with success rates of 20-35 % per cycle, but the likelihood of getting pregnant decreases with each round while the cost increases .(4) An overreaction to gonadotropin-induced ovulation induction, particularly in in-vitro fertilization cycles (IVF), and infrequently to clomiphene citrate-induced ovulation induction, result in ovarian hyperstimulation syndrome (OHSS), an iatrogenic complication of controlled ovarian hyperstimulation (COH). Although severe forms of ovarian hyperstimulation syndrome (OHSS) occur in 0.5–5% of assisted reproduction treatment (ART) cycles, this iatrogenic entity can affect 12–25% of IVF cycles. In most severe form, OHSS has even been reported to cause maternal death. (5)

Siddha management of tubal block proves beneficial. The present article provides evidences in the role of siddha regimen for treating tubal block. This case report describe about a patient visiting Ayothidoss pandithar Hospital with female infertility due to Tubal block. She was treated with siddha regimen comprising chiefly *Aadutheendapalai ennai* and *Panchapashana chenduram* along with other medicines which proves beneficial in managing tubal block.

Case presentation

A twenty-five year old female patient homemaker, came with the complaints of failure to conceive for the last three years of active married life, visited outpatient department of Ayothidoss pandithar hospital for siddha treatment. The female partner had a history of a medical termination of pregnancy and two ectopic pregnancies. She has regular menstrual history for three days of every menstrual phase between 25-30 days with a moderate menstrual flow with 3-4 pads per day and had no history of dysmenorrhoea. The partners are non consanguineous marriage and does not have any relevant family history. There was no significant history of genital tuberculosis, sexually transmitted diseases. Physical examination revealed normal pulse, temperature, blood pressure. On examination, the patient she was afebrile, General condition was fair, no pallor, no pedal oedema, no lymphadenopathy. No added sounds on CVS and RS examination.

On gynaecological examination, the cervix was healthy with no abnormal discharge, per vagina-uterus was anteverted, normal in size, all fornices are free and mobile.

The patient conceived in the month of march 2019 which was her first pregnancy. The foetus was terminated due to low cardiac activity with gestational age of 13-14 weeks and dilatation and Curettage was done. After taking healthy diet for six months the patient got conceived for the second time in the month of September 2020. It was an ectopic pregnancy on the left fallopian tube. She visited the nearby hospital with the complaints of lower abdomen pain and vomiting. On seeing USG- Pelvis she was diagnosed with ruptured ectopic pregnancy with hemoperitoneum. Laparoscopic left salpingectomy was done. The patient had her third pregnancy in the august month of 2021 which was an unruptured ectopic pregnancy in the right

fallopian tube. She was undergone medical management for preserving the right fallopian tube. After that she had taken normal healthy diet for six months. In 2022 during September month as they were trying to conceive a child her HSG report revealed a middle / distal tubal block on the right proximal fallopian tube. As there was only one fallopian tube the partners were advised to go only for IVF treatment. As there were repeated ectopic pregnancy the partners were not willing to go for allopathy treatment and to adopt any artificial reproductive techniques. As IVF was economically inconvenient and the success rate was also low the patient did not go for IVF. She was referred by another successful patient to visit National Institute of siddha as outpatient case. The patient was diagnosed as *penn maladu* (Female infertility). As per siddha text the treatment was initiated with oleation followed by purgation then by internal medicines. Oleation was given to normalize the deranged *kapha thodam*. Purgation was given to normalize the deranged *vadha thodam* and internal medicines were given to normalize the deranged *pitha thodam*.

Therapeutic intervention

The treatment was started with oleation followed by purgation. Then internal medicines were given for the clearance of tubal block. On the first day oleation was given with *chukku thylam* 100 ml externally applied from head to foot. It is advised to leave for fifteen minutes and then to take bath in warm water. On second day purgation was given with *Agasthiyar kuzhambu* with dose of 200 milligram in *arasilai kozhunthu karkam* (paste of peepul tree's tender leaves). After purgation the patient was advised to avoid spices and to take only curd or buttermilk .On third day patient was asked to take complete rest and to take normal diet. On fourth day *Aadutheendapalai ennai* was given during night with dose of 5 ml in *neeragaram* (porridge with water) after food. *Mathulai manapagu* 5 ml was given with warm water twice a day after food, *Venpoosani nei* 5 ml was given in food. *Panchapashana chenduram* was given with a dose of 60 mg in milk and palm jaggery twice a day after food for seven days with five days drug holiday for two months. The patient was followed for two months and then hysterosalpingography was taken.

After two months she was advised to take HSG. The result revealed patent tube on the right side. Blood parameters- CBC, LFT, RFT were taken before and after treatment.

Diagnostic assessment

Blood Parameters

Table 1: Complete Blood Count

	Before Treatment (08.01.2023)	After Treatment (15.05.2023)
Hb	10.5 gm%	10.0 gm%
Total WBC	7200 cells/cu.mm	5400 cells/cu.mm
Polymorphs, leucocytes, eosinophils	P-63%,L-34%,E-0 3%	P-56%,L-41%,E-0 3%
Total RBC	4.1 million/cu.mm	3.9 million/cu.mm

PCV/HCT	33.8%	31.9%
MCV	82.2	81.4
MCH	25.5	25.5
MCHC	31.1	31.3
Platelets	3.4	3.3

The complete blood count profile taken before and after treatment is mentioned in the table 1.

Table 2: Liver Function Tests

	Before Treatment	After Treatment
T.Bilirubin	0.3 mg/dl	0.2 md/dl
D.Bilirubin	0.2 mg/dl	0.1 mg/dl
ID.Bilirubin	0.1 mg/dl	0.1 mg/dl
AST/SGOT	30 U/L	19 U/L
ALT/SGPT	18 U/L	10 U/L
ALK.Phosphatase	64 U/L	39 U/L

The liver function test profile taken before and after treatment is mentioned in table - 2

Table 3: Renal Function tests

	Before Treatment	After Treatment
Urea	10 mg/dl	16 mg/dl
Creatinine	0.8 mg/dl	0.9 mg/dl

The renal function test profile taken before and after treatment is mentioned in table – 3.

Scan: Hysterosalpingography

Figure 1

Figure 1.1



Inference: There is no spillage over the Right Fallopian Tube

Figure 2.1: HSG Report- Before treatment

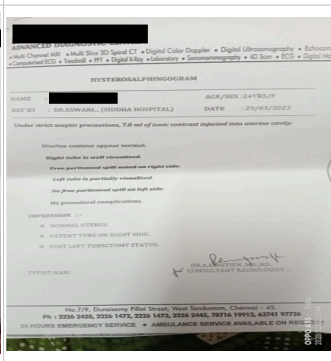


Figure 1.2



Inference: There is spillage over the Right Fallopian tube

Figure 2.2: HSG Report- After treatment



Discussion

In tubal block the pathophysiology mainly involves epithelial destruction by infection which is the most common reason for tubal occlusion. Aadutheendapalai ennai consist of *Aadutheendapalai* (*Aristolochia bracteolata* Lam), *Seeragam* (*Cuminum cyminum* L) and Gingelly oil. *Pancha pashana chenduram* consist of *vellaipadanam* (white arsenic), *manosilai* (arsenic ruberum), *aridharam* (arsenic), *soodham* (mercury), *lingam* (cinnabar). The medicine is indicated for treating cancer cells (*puttru*). *Pancha pashana chenduram* has increased cytotoxic potential. It produces cytotoxicity by initiating apoptosis through up regulation of Bax, p53 and down-regulation of BCL2 mRNA expression.(6) Chronic salpingitis can lead to Salpingitis Isthmica Nodosa (SIN).The disease appears to be progressive even without any recognized ongoing stimulus. Lesions grow over time and eventually obliterate the tubal lumen. The lesions of SIN occur primarily around the intramural and proximal isthmus endosalpinx. The etiology remains controversial; inflammation, mechanical factors, hormonal factors, and congenital predisposition are possible causes.(7) Most investigators favour an infectious or inflammatory etiology but this is unresolved. The presence of mercury, arsenic, sulphur in *Pancha pashana chenduram* indicates that the drug possess antimicrobial, anti-inflammatory activity. *Aadutheendapalai* (*Aristolochia bracteolata* Lam) also has anti-microbial, anti-inflammatory, anti- oxidant activity which reduces the infection and the inflammatory changes in the fallopian tube. *Venpoosani nei* comprising chiefly *venpoosani* (*Benincasa hispida* Thunb) possess anti-oxidant,anti microbial and anti inflammatory activities.(8) The active components present in *Madhulai manapagu* which consist mainly of *Madhulai* (*Punica granatum*) possess anti-inflammatory, antioxidant, and anticancer activities.(9) There was no any adverse drug reaction during the treatment period. The haematology, LFT, RFT reports were ensured after taking the medicines. Hysterosalpingogram reports revealed presence of Right tubal block before treatment (Figure 2.1) and patent tube on Right side after treatment (Figure 2.2). The patient is still under medication for female infertility. However a single case cannot draw a conclusive comment on the efficacy of siddha treatment of tubal block. The information provided by this case study may also be useful for planning future case series development. So *Aadutheendapalai ennai* and *Panchapashana chenduram* can be a good drug of choice to treat infertility in female due to tubal block. So far there was no articles in siddha discussed about case of female infertility due to tubal block. Further case series can be done to know the effectiveness of the medicine in managing tubal block. Nowadays people go for IVF treatment which is economically expensive and the success rate is also 30% to35%. So management of tubal block through siddha medicine could be a better option as it is non- invasive and cost efficient.

Conclusion

Siddha medicine has done amazing work for tubal block cases. Thus, this instance further demonstrates the efficacy of siddha medications in the management of tubal block for female infertility. However, a more well-designed study with large sample size warranted to strengthen the evidence to show the effectiveness of Siddha treatment in managing tubal block. The current case report offers verifiable proof of managing tubal block with siddha medications.

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