

Tubal Ectopic Pregnancy after 11 Years of Bilateral Tubal Ligation

M B Parvin¹, K S Begum², N Jahan³, H Sultana⁴

Abstract

Tubal ligation is a well accepted method of contraception. Permanent contraception by tubal ligation is one of the most commonly used contraceptive methods in United States, also most popular form of contraception worldwide. Although pregnancy after ligation is uncommon, it can occur and may be ectopic. Surprisingly, failures are not limited to the first year or two but continued to appear even after many years during follow up. In this paper we report a case of ectopic pregnancy in a patient who underwent bilateral tubal ligation 11 years ago during caesarean delivery for contraception.

Introduction

Ectopic pregnancy results, when the fertilized ovum implants anywhere other than the endometrial lining of the uterus. Ruptured ectopic pregnancy is a life threatening emergency in pregnancy that can lead to maternal death¹. Early diagnosis & treatment is important in preventing potential complications.

Tubal sterilization is a common method of contraception, however the rate of ectopic pregnancy is high in failed cases². A study in a series of ectopic pregnancy cases revealed 4.53% of these had tubal ligation³.



Fig : Fresh & clotted blood in abdominal cavity

Case report

A 40 years old lady, Para: 3 (caesarean-section), presented with complaints of amenorrhea for 7 weeks & lower abdominal pain for 2 days. She underwent bilateral tubal ligation 11 years back during her last caesarean section. At presentation her pulse was 104/min, BP was 90/60 mm of Hg & she was moderately anaemic. On abdominal examination tenderness present in lower abdomen & on bimanual examination found positive cervical excitation test, tender left adnexa. She had novaginal bleeding at presentation

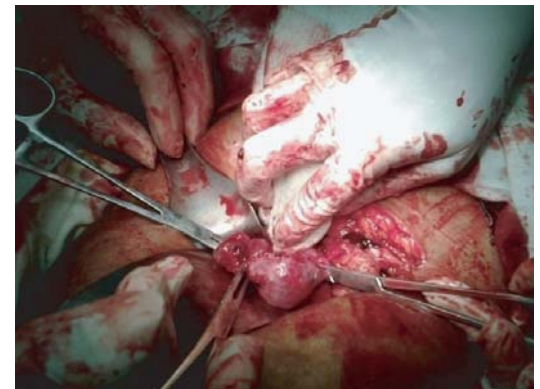


Fig : Left sided fallopian tube with ectopic mass

Her urinary pregnancy test was positive. Transvaginal ultrasonography showed Left adnexal mass (4.4 X3.2) cm, empty uterine cavity and moderate pelvic collection. Serum beta hCG was 974 IU/ml.

Immediate exploratory laparotomy was performed with diagnosis of rupture ectopic pregnancy. Per operatively moderate amount clotted and fresh blood was found in the abdominal cavity, swollen left tube with ectopic mass at ampullary region. Active bleeding was seen through left sided tubal ostium. About 300 ml of blood was sucked out from abdomen. Bilateral salpingectomy was performed. Her post

¹ Dr. Mosammat Bilkis Parvin
Assistant Professor
Dept. of Gynae & Obs
MH Samorita Medical College

² Dr. Kazi Sahnaz Begum
Assistant Professor
Marks Medical College

³ Dr. Naseem Jahan
Associate Professor
Dept. of Gynae & Obs
Dinajpur Medical College

⁴ Prof. Dr. Hasina Sultana
Professor and Head
Dept. of Gynae & Obs
M H Samorita Medical College

Correspondence

Dr. Mosammat Bilkis Parvin
Assistant Professor
MH Samorita Medical College
Email: drbilkisparvin@gmail.com

operative course was uneventful, got perand post-operative blood transfusion. She was discharged on 5th post-operative day. Histopathology report showed specimen consisted of conceptus with chorionic villi.

Discussion

Tubal ligation is one of the chosen option for female contraception and usually tubal sterilization are considered to have a lower risk of pregnancy. However tubal sterilization can be failed and in cases of failure usually the resulting pregnancy could be ectopic. The incidence of ectopic pregnancy is higher when sterilization is performed during the postpartum period because the edematous, friable and congested fallopian tube following pregnancy increases the chance of incomplete occlusion of the tubal lumen³. In our case postpartum tubal ligation done. In a large multicenter study revealed 10 years cumulative ectopic pregnancy risk (among the women who underwent tubal sterilization) is 7.3 per 1000 procedures. Of all methods, bilateral tubal coagulation is the one known to causing the highest risk of ectopic pregnancy⁴.

One study showed that the likelihood of an ectopic pregnancy varied according to the method of sterilization and the age at which the woman underwent the sterilization procedure. Woman who are under the age of 30 years at time of the procedure were twice as likely to have a subsequent ectopic pregnancy as older woman⁴. Further the researchers found that pregnancy may occur many years after tubal sterilization⁵. In our case patient had bilateral tubal ligation 11 years back and she was presented with ectopic pregnancy at her 40 years of age. Recanalization or formation of a tuboperitoneal fistula is the probable explanation of these ectopic gestation after tubal ligation. The sperms may pass through the fistula but the fertilized ovum cannot. Implantation of fertilized ovum occurs classically in the distal tubal segment^{6,7}. In our case rupture site was in distal tubal segment.

12% of patient with ectopic pregnancy are not diagnosed at the initial presentation. It should be kept in mind that all females of childbearing age are potential candidates for ectopic pregnancy. The presence of a tubal sterilization history should not draw the physician away from establishing the diagnosis.

Ultrasonography and Serum beta hCG are recommended for establishing the diagnosis⁸.

Conclusion

The history of tubal sterilization does not rule out the possibility of ectopic gestation even many years after the procedure. Whenever tubal sterilization is performed in conjunction with a pregnancy event such as in puerperium, extra care and meticulous technique are required to avoid failure. It is of great importance for doctors involved in the care of child bearing age

woman to be aware of this fatal complications.

References

1. Lewis G . The confidential enquiry in to maternal & child health(CEMACH): saving mothers live : reviewing maternal death to make motherhood safer 2003-2005. The Seventh Report of confidential Enquiry in to maternal death in united kingdom,London(CEMACH) 2007; 93-4.
2. Brenner PF, Benedetti, MishellDr Jr. Ectopic pregnancy following tubal sterilization surgery. *Obstetgynecol* 1977; 49 : 323 -4.
3. Shah jp,parulkersv , Hinduja IN .Ectopic pregnancy after tubal sterilization . *J postgrad Med* 1991;37:17-20.
4. Herbert Peterson, ZhisenXia,Joyce Hughes, Lynne Wilcox, Lisa Tylor,and James Trussell for the U.S. Collaborative Review of sterilization working group in the March13, The risk of Ectopic pregnancy after tubal Sterilization *The New England journal of Medicine* 1997; 336: 762-767.
5. Bouyer J, Coste J, Fernandez H, Pouly J L job-SpiraN . Sites of ectopic pregnancy : a 10 year population based study of 1800 cases. *Hum Report*2002; 17(12): 3224-30.
6. Napolitano PG Vu K, Rosa C. pregnancy after failed tubal sterilization. *J Reprod Med* 1996; 41 : 609 -13 .
7. Sultana A khan U Ectopic pregnancy following reversal of tubal ligation. *Ann Abbasi ShaheedHosp* 2001 ; 6:328-8
8. ACEP clinical policies Committee and Clinical policies sub committee on Early pregnancy . American College of Emergency Physicians. Clinical policy : critical issues in the initial evaluation and management of patients presenting to the emergency department in early pregnancy . *Ann Emerg Med* 2003; 42 : 123 -33.