



Schistosomiasis Resulting in Tubal Ectopic Pregnancy - Case Report

Dr. Manjula Reddy. H¹, Dr. Kalpana¹

Corresponding Author: Dr. Manjula Reddy. H, GMCHRC and GMU Ajman, UAE .

Copy Right: © 2022 Dr. Manjula Reddy. H, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received Date: August 05, 2022

Published Date: August 15, 2022

Abstract

Female genital schistosomiasis an endemic disease in Africa, infects commonly cervix, vagina, and the urinary bladder. It is a significant risk factor causing infertility and ectopic pregnancy in these endemic countries. A case report of unruptured tubal ectopic pregnancy in an young African patient, resident of United Arab Emirates has been presented emphasizing the importance of detailed history taking and evaluation of the patients coming from these endemic countries.

Introduction

According to WHO, Schistosomiasis affects almost 240 million people worldwide, and more than 700 million people live in endemic areas. (1) The infection is prevalent in tropical and sub-tropical areas. Urogenital schistosomiasis is endemic in 53 countries in Africa and Middle East. Urogenital schistosomiasis is usually caused by *Schistosoma haematobium* due to the pelvic venous plexus and is a major health concern as it results in major morbidity. It commonly affects Cervix, vagina, and the Fallopian tubes. However the eggs are relatively commonly seen in the ovaries and uterus ,hence probably results in underdiagnoses in clinical practice[6]Studies have shown a prevalence of 33-75% of female genital schistosomiasis is due to *S. hematobium* in endemic areas.

Female genital schistosomiasis is associated with significant morbidity including infertility, ectopic pregnancy, vesicovaginal fistulae, and susceptibility to superinfections with bacteria and viruses.

A case of unruptured tubal ectopic in an asymptomatic patient from Mali is presented to stress the importance of a meticulous history and further evaluation in women coming from endemic areas.

Case report

A 22 year old resident of UAE,from Mali(Africa) ,attended a private hospital in UAE with complaints of irregular vaginal bleeding since a month. There was no history of amenorrhea preceding this complaint. She had done a home pregnancy test and was positive. She was extremely anxious as she had been inserted with IUD 6 months back. Para 3, and last childbirth was 2 years ago and always had irregular cycles.

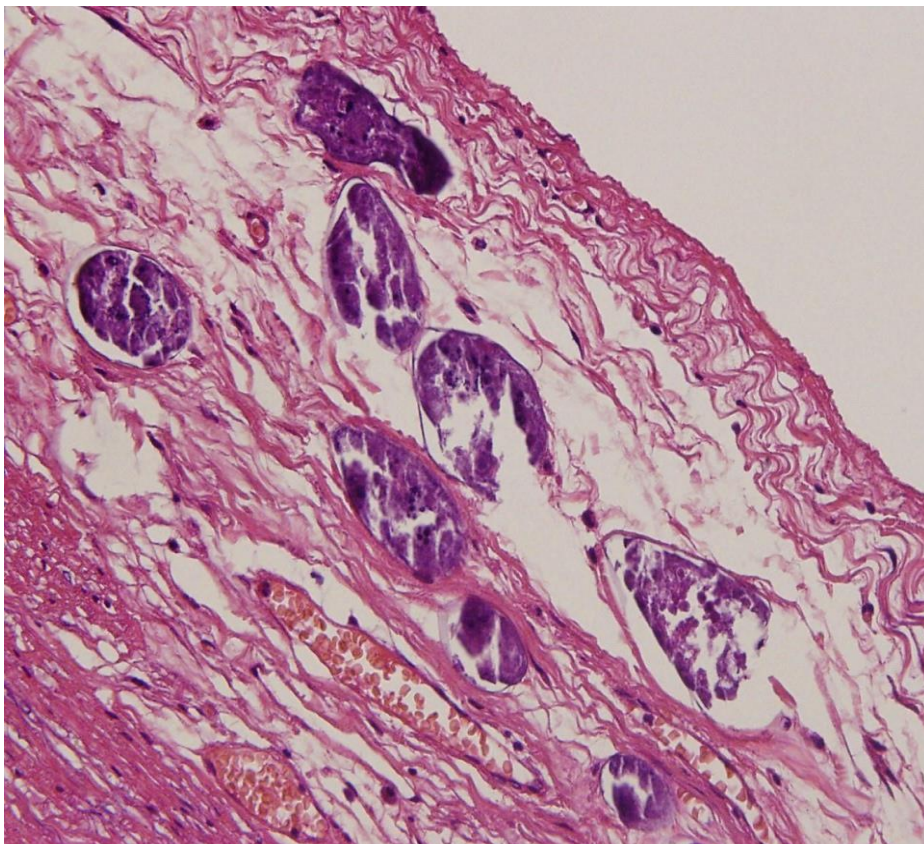
On examination she was not pale, with normal vitals. Abdominal examination was unremarkable. Vaginal examination was unremarkable too, except for a minimal brownish discharge and IUD threads were seen .

An immediate CBC, β HCG titer and pelvic ultrasound was done. Hemoglobin was 11.8gm%, β HCG-13,852 Miu/ml and pelvic scan showed normal sized uterus with IUD in situ,Right ovary showed corpus luteum and an adjacent thick walled cystic lesion of 3.2x2.4cm with yolk sac. No free fluid was seen. A diagnosis of right sided unruptured tubal pregnancy was made.

Due to financial constraints patient opted for laparotomy instead of laparoscopy. Laparotomy revealed normal uterus , ovaries and right isthmoampullary ectopic 3x2 cm, felt firm and was not vascular. Contralateral tube was normal. Right salpingectomy was done. IUD was removed as well.

The histopathology confirmed ectopic pregnancy, but to our surprise it showed calcified ova of Schistosoma in the submucosa and intramural part of the fallopian tube and was surrounded by mixed inflammatory infiltrate predominantly consisting of eosinophils and rare giant cells.

The patient made an uneventful postoperative recovery and was further treated by the physician with praziquantel.



Calcified eggs of Schistosoma in the wall of the fallopian tube on high power (40x)

Discussion and conclusion

Female genital schistosomiasis is an endemic disease, often asymptomatic but can affect all female genital organs. Ova are commonly found on the cervix, vagina, ovaries, fallopian tubes, and vulva, and very rarely in the uterus.[2].The case presented illustrates Schistosomal infestation of the fallopian tube as one of the cause of tubal pregnancy in endemic areas. It has been reported even in travelers with history of contact with water bodies in endemic areas [4,5] Manifestations of Schistosomal tubal disease could range from mild inflammatory reaction to severe granulomatous reaction with tubal blockage.[7]

Urogenital Schistosomiasis are commonly caused by Schistosoma (S.) haematobium in 50-80% which infests the urinary bladder. Infection is contracted by contact with fresh water containing the cercariae larva released from the water snail the intermediate host, which penetrates the human skin. The water snails are infected by the miracidia which develop from the ova excreted from infected humans. Infected snails reinfect humans to continue the cycles [3,4,5].

Histopathologic examinations has shown that S. haematobium ova can be found in all female genital organs, most commonly the cervix and vagina and rarely tubes [7]. The incidence of tubal pregnancy is about 60% with tubal schistosomiasis compared to 33% in patients without it [2]. The mechanism is said to be due to granulomatous inflammatory reaction or fibrosis leading to mechanical obstruction or ischemia[7,8] due to ova deposition in the terminal veins of tube .

Female genital schistosomiasis pose a diagnostic challenge as most are asymptomatic and the ova are rarely excreted in urine and stools [6,7].

This young African patient living in UAE had good fertility and had 3 children. She rather had IUD inserted in the same hospital 6 months back. IUD was suspected as the cause of salpingitis and tubal pregnancy, schistosomiasis was never suspected as the primary cause. Considering the diagnostic limitations as seen in this case , geographical background of the patient and a mandatory histopathological evaluation of the surgical specimen is the only way to diagnose genital schistosomiasis in these asymptomatic cases considering the diagnostic limitations.

Schistosomal tubal obstructions as the cause of ectopic pregnancies and female genital diseases should not be forgotten in endemic areas. The control programme based on treatment with praziquantel will enable the reduction of their incidences.

References

1. World Health Organization. Schistosomiasis, Fact Sheet No 115. March 2013, <http://www.who.int/mediacentre/factsheets/fs115/en/>
2. H. Hoffmann and I. Bauerfeind, "High tissue egg burden mechanically impairing the tubal motility in genital schistosomiasis of the female," *Acta Obstetricia et Gynecologica Scandinavica*, vol. 82, no. 10, pp. 970–971, 2003.
3. X. Catteau, A. Fakhri, V. Albert, B. Doukoure, and J. C. No"el, "Genital schistosomiasis in European women," *ISRN Obstetrics and Gynecology*, vol. 2011, Article ID 242140, 4 pages, 2011
4. A. Z. Mohammed, S. T. Edino, and A. A. Samaila, "Surgical pathology of schistosomiasis," *Journal of the National Medical Association*, vol. 99, no. 5, pp. 570–574, 2007.
5. N. M. Nour, "Schistosomiasis: health effects on women," *Reviews in Obstetrics & Gynecology*, vol. 3, pp. 28–32, 2010
6. Bahrami S, Alatassi H, Slone SP, O'Connor DM. Tubal gestation and schistosomiasis: a case report. *The Journal of Reproductive Medicine*. 2006;51(7):595–598. [PubMed]
7. Balasch J, Martinez-Roman S, Creus M, Campo E, Fortuny A, Vanrell JA. Schistosomiasis: an unusual cause of tubal infertility. *Human Reproduction*. 1995;10(7):1725–1727. [PubMed]