Isloated tubal torsion in a fourteen year old girl

Dr Junaid Rafi,Dr Humera Fayyaz,Dr Amir Salih (Obstetrics & Gynecology Department , Scarborough General Hospital, North Yorkshire Trust , Scarborough, YO12 6QH, U.K.)

Abstract

Isolated torsion of fallopian tube is a rare event and often difficult to diagnose. This report describes such a condition in a patient who presented with pain lower abdomen and underwent laproscopy primarily by surgeons with the suspicion of appendicitis but eventually ended up in right salpingectomy because of isolated right tubal torsion. The issue of future fertility was obviously considered but unfortunately the tube could not be preserved because of necrosis and haemorrhage inside it. Tubal torsion should however be kept in mind in the differential diagnosis of lower abdominal pain in women of all ages.

Keywords: Isolated Tubal Torsion, Lower abdominal pain, Adolescent girls.

Introduction

Isolated fallopian tube torsion is a rare cause of lower quadrant abdominal pain that primarily and was first described by Bland-Sutton in 1890 and has a prevalence of one in 1.5 million women.[1] Although a number of cases of fallopian tube torsion in adolescent girls have been reported in literature however the cases of isolated tubal torsion presumably in normal fallopian tube without predisposing risk factors are rare and exact number is not known. Acute pelvic pain in a non pregnant female patient is a common clinical scenario with a broad clinical differential diagnosis .Diagnosis can be delayed because there are no specific signs, symptoms or imaging characteristics related to this entity. Therefore a high index of suspicion is required to make an early diagnosis so that ovaries and tubes can be preserved ultimately preserving the fertility in young females who have not completed their family.

Case Presentation

A 14 year of girl was presented at 1800hrs with the complaint of worsening sudden sharp shooting pain in right iliac fossa initially started at 1000 hrs in the morning. There were no associated symptoms of nausea, vomiting or any urinary symptoms.

The surgical team did the initial assessment and found tenderness of the right lower quadrant of the abdomen with guarding signs and rebound tenderness. The Rovsing\'s sign was also positive.Blood test showed normal liver and renal function tests, while her Haemoglobin was 13.6 g/dl; WBCs 12.2x 109/L and CRP was <0.3mg/L.Patient was haemodynamically stable otherwise.

On clinical grounds the diagnosis of appendicitis was made and the patient was proposed for laproscopic appendectomy.The surgeons found a thickened appendix with adhesions. However they also noted a haemorrhagic structure (? Haemorrhagic cyst/? ectopic pregnancy) arising from right tube so the Gynaecologists were asked for their opinion. A right twisted tubal torsion with clotted blood was identified .There was also approx. 100ml clotted blood in the pouch of Douglas and surprisingly this much blood loss is not seen with isolated tubal torsion (Figure).

Figure: Torted right tube with normal right ovary, left tube and ovary; (no sign of adnexal venous congestion, adhesions, cysts, ovarian and para-ovarian masses).

Appendectomy was performed by surgeons while right salpingectomy was performed by the consultant gynaecologist .Right ovary, left tube and ovary were normal. The patient made uneventful speedy recovery.

Discussion

Differential diagnosis include ovarian torsion, rupture of the ovarian follicle (mittelschmerz) or cyst, appendicitis, urolithiasis, and cystitis.Ectopic pregnancy and pelvic inflammatory disease were excluded as our patient was virgin and also urine pregnancy test was negative.Tubal torsion more commonly affects the right side, possibly because of partial immobilization of the left tube by its proximity to the sigmoid mesentery and because right lower quadrant pain is more often surgically

explored secondary to the concern for appendicitis.[2] Risk factors for isolated fallopian tube torsion include both intrinsic factors, including pelvic inflammatory disease, hydrosalpinx, tubal ligation, and tubal neoplasm; and extrinsic factors such as adhesions, adnexal venous congestion, adjacent ovarian or paraovarian masses, uterine masses, gravid uterus, and trauma.[3] Our patient did not have any of the above risk factors for torsion at the time of presentation.
Its quite evident from the Figure that the tube (necrosed) could not have been preserved in this case. Treatment options include surgical detorsion, salpingotomy, and salpingectomy depending on the stage of intervention and presence of complications.4 The diagnosis cannot be made preoperatively.[5] It is therefore important that the operator diagnosing appendicectomy in the menstruating female should bear in mind the possibility of gynaecological pathology which can be easily missed especially if not doing the procedure laproscopically.

Conclusion

To conclude, fallopian tube torsion should be considered in the differential diagnosis of acute lower abdominal and pelvic pain in all adolescent girls. Only early recognition of this condition and prompt intervention increase the likelihood of tubal-sparing surgery and preservation of fertility.

References

1.Ferrera PC, Kass LE, Verdile VP. Torsion of the fallopian tube. Am J Emerg Med 1995; 13: 312-4.
2.Bondioni MP, McHugh K, Grazioli L. Isolated fallopian tube torsion in an adolescent: CT features. Pediatr Radiol 2002; 32: 612-3.
3.Provost MW. Torsion of the normal fallopian tube. Obstet Gynecol 1972; 39: 80-2.
4.Gross M, Blumstein SL, Chow LC. Isolated fallopian tube torsion: a rare twist on a common theme. AJR Am J Roentgenol 2005; 185: 1590-2.
5.Monaghan JM. Torsion of the isolated fallopian tube.British Journal of Surgery 1973; 60: 1.