TORSION FALLOPIAN TUBE

(A Case Report)

Lt Col AD DWIVEDI*, Lt Col JJJ FALLEIRO, SM⁺,
Maj S DEBNATH[#]

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Introduction

Normal fallopian tube or chronically inflamed fallopian tube is known to undergo torsion producing acute abdomen, clinically simulating a disturbed ectopic gestation. In the absence of diagnostic aids like ultrasonography (USG), laparoscopy and beta human chorionic gonadotrophin estimation, it is difficult to differentiate this condition from disturbed ectopic gestation. Torsion of tube leads to haematosalpinx, haemoperitoneum and gangrene of tube necessitating laparotomy and salpingectomy. This condition is not common, Sir N Jeffcoate reported 6 cases [1] and Diamant YZ et al reported only 4 cases [2]. This importance of an early diagnosis of torsion of tube, by USG and laparoscopy, on which salvage of tube depends, is emphasised.

Case Report

A 23-year-old female, case of primary infertility of 4 years duration, was admitted with complaints of bleeding per vaginum of 3 days duration, severe colicky pain in lower abdomen and vomiting of 8 hours duration. There was history of amenorrhoea for 33 days without any syncopal attacks. Her menstrual cycles were regular.

On examination she had tachycardia (pulse 100/min) with blood pressure 120/80 mm of Hg. There was no pallor or pyrexia. There was no distension of abdomen, guarding and marked tenderness was present in left iliac fossa. Bowel sounds were present. Pervaginal examination revealed bleeding with healthy and firm cervix. However, due to marked tenderness in left fornix, size of uterus could not be made out. Movement of cervix was very painful. The pouch of Douglas was also tender on palpation. A provisional diagnosis of tubal abortion or acute salpingitis was made.

On investigation haemoglobin was 11 gm per cent, total leucocyte count 8800/cu mm and normal differential leucocyte count. Her blood group was B Rh negative. Random blood

sugar was 96 mg per cent. Urine routine examination was not contributory and Gravindex test was negative.

She was placed on conservative management with intravenous fluids, injection Ampicillin 500 mg intravenous 6 hourly and injection Gentamycin 60 mg intravenous 8 hourly. Monitoring of pulse, respiration and blood pressure was continued. Pain abdomen increased over the following 6 hours and guarding became more prominent with increased tenderness in left fornix.

As the facility of USG or laparoscopy was not available, exploratory laparotomy was carried out under general anaesthesia. There was about 100 mL of free blood in the peritoneal cavity. Left fallopian tube was distended with blood and had turned gangrenous in its complete length due to torsion on mesosalpinx. Left ovary and ovarian ligaments were not involved. The uterus, round ligaments and broad ligaments were normal. Ovaries were healthy but right tube had evidence of chronic salpingitis and narrowing of fimbrial ostium without any adhesions or bands. However, possibility of ectopic gestation with torsion could not be ruled out. Salpingectomy on left side was done and tube was sent for histopathological examination. Post-operatively she made an uneventful recovery and was discharged on 7th post-operative day.

Histopathological examination showed transmural ischaemic necrosis, with lumen of the tube filled with blood and proteinaceous exudate. The mucosal folds showed an acute on chronic inflammatory cell infiltrate. No granulomas were found. Multiple sections were studied but no evidence of ectopic gestation was found. A diagnosis of ischaemic necrosis with haematosalpinx due to torsion and acute on chronic salpingitis was made.

Discussion

Torsion of a normal tube is known to occur in young and adolescent girls with symptoms of acute abdomen having history of similar attacks and remissions in the past [3]. However, in reproductive age group it is preceded by one or other pathology of tubes. Patients, with torsion of tube, present with pain lower abdomen, more on

*Classified Specialist (Obstetrics & Gynaecology), Military Hospital, Ambala Cantt, Haryana 133001; ⁺Classified Specialist (Pathology) 181 Military Hospital, C/o 99 APO; [#]Graded Specialist (Anaesthesiology), 305 Field Ambulance, C/o 99 APO

affected side, with vomiting and bowel irritability. The syncope, which often accompanies a disturbed ectopic gestation, may not be present. Clinically the differentiation from other causes of haemoperitoneum or acute inflammation of viscera like appendicitis or diverticulitis is not possible. Where facilities for further investigations are not available, recourse to laparotomy has to be made as salvage of tube depends on time passed since onset of symptoms. In such cases, an early diagnosis and surgical intervention is of paramount importance.

Torsion of normal tube in childhood and adolescents is due to unusual physiological mobility of organs. For similar mechanical reasons even small tumours with long pedicle can cause torsion of tube. In reproductive age group torsion of tube can be preceded by salpingitis, hydrosalpinx, haematosalpinx, ectopic gestation, ovarian tumours and adhesions or bands. The torsion also could be initiated by asymmetrical growth of tumours, long mesosalpinx, tubal spasm, haemodynamic factors or sudden alteration of body position.

Irrespective of the initial cause or force which commences torsion of mesosalpinx or the pedicle, the further twisting is due to haemodynamics. Once torsion takes place, venous flow gets obstructed leading to congestion of tissues, oedema and extravasation of blood forming haematosal-

pinx and haemoperitoneum. Later, arterial blood supply gets affected and organ turns gangrenous and nonviable.

Tubal torsion needs to be differentiated from acute salpingitis, ruptured cyst, ectopic gestation, acute appendicitis, acute diverticulitis, renal colic and other causes for intra-peritoneal haemorrhages. USG, laparoscopy and beta human chorionic gonadotrophin estimation can help in establishing an early diagnosis of such cases. The treatment remains laparotomy followed by partial or total salpingectomy depending on extent of gangrene. In absence of other aids diagnostic laparotomy should be performed without delay to salvage the tube. Unfortunately this patient, a case of primary infertility, lost her left tube due to torsion and complete tube turning gangrenous and the right tube also was not healthy having evidence of chronic salpingitis with narrow fimbrial ostium.

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