Successful laparoscopic management of ruptured ectopic pregnancy with extensive intraperitoneal adhesions

Pany Supriya and Padhy Biren

Abstract
Ruptured ectopic gestation arises due to implantation of the fertilized ovum outside the endometrial cavity with eventual rupture. Ruptured ectopic pregnancy is a life threatening condition that merits expeditious surgery to avert a catastrophe. Now a day’s laparoscopic management of such an emergency has evolved as an effective alternative to open surgery. Previous abdominal surgeries result in dense and extensive intraperitoneal adhesions and managing a ruptured gestation with massive haemoperitonium in such circumstances laparoscopically can be extremely challenging. But Improved Anesthesia and cardiovascular monitoring, together with advanced laparoscopic surgical skills and experience, justifies operative laparoscopy for surgical treatment. We report the management of such cases of ruptured ectopic gestation with extensive post-operative adhesions due to previous two surgeries which are managed successfully along with the research and discussion.

Keywords: Ectopic gestation, laparoscopy, haemoperitonium, harmonic scalpel

1. Introduction
Ruptured ectopic gestation is a condition that arises due to implantation of the fertilized ovum outside the endometrial cavity with eventual rupture. It is a serious emergency that merits immediate diagnosis and expeditious surgical management in order to prevent a catastrophe. Surgery remains the first and only treatment option when rupture causes intraperitoneal hemorrhage. Now a day’s laparoscopic management of such an emergency has evolved as an effective alternative to open surgery. With experience and suitable instrumentation even difficult cases can be managed safely. Previous abdominal surgeries result in dense and extensive adhesions and dealing with a ruptured gestation with a massive haemoperitonium in such circumstances challenges the limits of surgical skill. We report a case of successful management of a case of ruptured ectopic gestation who had extensive post-operative adhesions due to previous two surgeries

The Case
A 35 year old female was admitted to our hospital with severe pain abdomen of 24 hours duration and features of shock with a prior diagnosis of (velocit positive and Ultrasonography) ruptured ectopic gestation. Previously she had undergone two Laparotomies (right tubo-ovarian mass and a laparotomy after a failed diagnostic Laparoscopy). Clinically she had features of shock with extreme pallor, tachycardia, and a low blood pressure of 90 systolic and 60 diastolic. She was immediately resuscitated with colloid infusion and planned for surgery. We decided for a laparoscopic approach with a prompt conversion if the need arose. On entering we could not visualize the pelvis properly due to extensive adhesions due to the previous surgeries. We did an extensive adhesiolysis freeing the multiple layers of bowel and omentum [fig 1]. There was a massive amount of blood in the Peritoneal cavity [fig 2] which was partially sucked out till we located the site of bleeding which was a rupture of the right fallopian tube with the extrusion of the product of conception[fig 3]. An expeditious salpingectomy was performed with the help of Harmonic scalpel which resulted in the cessation of the bleed [fig 4]. Thorough toileting by repeated suction, irrigation was done and the procedure completed. The total duration was 55 minutes. The patient was given one unit of whole blood Post operatively and discharged after 2 days.
Discussion
Ruptured ectopic gestation necessitates prompt diagnosis and immediate surgery in order to save the life of the patient. It involves an emergency Laparotomy and control of the bleeding site. Among the known risk factors [1]. Our patient had a history of previous abdominal surgery and more specifically a previous tubal surgery. The technical advancement in the field of minimal access surgery has greatly enhanced the possibility of both diagnosing and treating ectopic pregnancy effectively [4]. Since the first excision of a tubal pregnancy through a laparoscopy by Shapiro & Adler [2], it has been used with increasing frequency. Laparoscopy has evolved as an effective to open surgery. Apart from the usual advantages of avoiding a long, disfiguring and painful incision, less morbidity, less hospital stay, laparoscopy offers some Unique advantages in this condition [3]. The ease of access and confirmation of diagnosis, wide, magnified and well lighted view of the abdominal cavity and the pinpoint location of the bleeding site Facilitates greatly in effective surgical intervention [5]. The availability of a safe and effective energy source like the Harmonic scalpel makes even difficult and late cases (as ours) dwell Easily [6]. In our center laparoscopy has totally replaced open surgery in the management of ruptured ectopic gestation. We have so far managed fifty seven cases of ruptured ectopic gestation laparoscopically without conversion in our centre.

Conclusion
Laparoscopic treatment (salpingostomy or salpingectomy) of ectopic pregnancy offers major benefits superior to laparotomy in terms of less blood loss, less need for blood transfusion, less need for postoperative analgesia and a shorter duration of hospital stay. With suitable experience, better equipment even late and complicated cases can be better dwelt with without resorting to laparotomy.

References