

# **TORSION OF THE NORMAL ADNEXA IN EARLY PREGNANCY AND LAPAROSCOPIC DETORSION**

Pages with reference to book, From 127 To 128

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## **INTRODUCTION**

Adnexal torsion is rare but an urgent surgical condition that usually occurs in women of reproductive age. The recommended treatment is immediate laparotomy. We present an example of torsion of normal adnexa during early pregnancy. Laparoscopy was used to establish the diagnosis and for the definitive treatment and pregnancy continued without any further problems. We consider that laparoscopic treatment of this condition is desirable in the management of girls and young women in whom the preservation of fertility is important.

## **CASE REPORT**

A 22 year old woman in her first pregnancy presented at the emergency room with lower abdominal pain of a few hours duration. The pain started suddenly and sharply. It had been 8 weeks since her last menstrual period and she had appendectomy four months ago. On vaginal examination, the uterus was enlarged to the size of an 8 weeks pregnancy. There was no sign of peritoneal irritation but the right adnexal area was very tender and the movement of the cervix caused exacerbation of the pain. The temperature, pulse, blood pressure, haemoglobin level and white blood cell count were normal. Ultrasound examination showed an intrauterine gestation sac containing a live foetus. There was no apparent abnormality in the adnexal area. The patient underwent a laparoscopy for exact diagnosis. Laparoscopic examination showed a normal uterus enlarged to the size of an 8 weeks pregnancy and a normal left adnexa, with corpus luteum. On the right side, ovary and tube was twisted 360°, they were oedematous and congested but there was no sign of permanent damage, so we decided to perform a laparoscopic detorsion procedure. She was given 5000 I.U. heparin intravenously for thromboembolism prophylaxis and the tube and ovary untwisted and appropriately located in the pouch of Douglas. Soon after they regained their normal colour. The same dose of heparin was repeated 12 hours later. After two uneventful days in hospital, she was discharged in a good condition. The pregnancy has reached 20 weeks gestation with no further problems at the time of presentation of this report.

## **DISCUSSION**

Torsion of adnexa is an emergency situation. It may involve either normal or pathological adnexa, either tube, or ovary, or both and is most commonly unilateral. Torsion of pathological adnexa is much more common than torsion of normal organs. Torsion of the normal ovary alone is exceptional but torsion of the normal fallopian tube with or without the ovary is not very rare and is mostly seen in childhood and adolescence because of physiological mobility of these organs at these ages<sup>1</sup>. The potential danger of adnexal torsion is the permanent destruction of the organs involved. Because the torsion is seen particularly during the reproductive ages, prompt diagnosis and treatment are essential if the adnexal organs and their function are to be preserved<sup>2</sup>. Ultrasound may suggest the diagnosis of adnexal torsion<sup>3-6</sup>. Laparoscopy should be considered as an essential step for the diagnosis<sup>7</sup>. If torsion is suspected or diagnosed, the recommended treatment is immediate laparotomy. The surgical

procedure then depends on the exact nature of findings. If vascular supply of the ovary and tube has become thrombosed or organ gangrenous, the organ should be excised without untwisting because of possible risk of thromboembolism<sup>7</sup>. Bider et al<sup>8</sup> described six pregnancies in which they untwisted necrotic or haemorrhagic adnexal masses with no complications. If the lesion suggests no irreversible damage to the organs and its blood supply, rapid restoration of natural perfusion may revitalize the organ permitting its recovery. These conservative approaches include untwisting of the organ and stabilizing by suture or cystectomy instead of oophorectomy<sup>7</sup>. There are some new approaches for the treatment. The incidence of ovarian cysts during the first half of pregnancy was observed to be 1 in 190. Because the presence of an ovarian cyst predisposes the adnexa to torsion. Rodin<sup>3</sup> has proposed ultrasound guide needle aspiration of simple cysts during pregnancy. Currently, operative laparoscopy has provided atraumatic surgical technique in gynecology. Evidence has been published that unexplained infertility can be caused by previous pelvic operation performed at laparotomy<sup>4</sup> and laparoscopic approach is far less invasive than laparotomy<sup>5</sup>. Shalev et al<sup>6</sup> reported two cases of adnexal torsion treated laparoscopically via aspiration of the cyst before untwisting and they claimed that it is easier to rotate the smaller masses and risk for recurrent torsion is reduced. In 1987, Vancaillie and Schmidt<sup>5</sup> presented a case of adnexal torsion due to an ovarian cyst treated laparoscopically by fenestration of the cyst and shortening of the ovarian ligament. Serial ultrasound examinations demonstrated recovery of follicular growth. They also mentioned a similar case treated laparoscopically but without shortening the ovarian ligament. We present a case of adnexal torsion diagnosed and treated laparoscopically during early pregnancy. We believe that adnexal torsion can be successfully treated by laparoscopy and it has the advantages of providing gentle surgical technique, preserving subsequent fertility, shortening hospitalization and less complicated post-operative course compared with laparotomy.

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