A CONSERVATIVE APPROACH TO UTERINE DEHISCENCE CASES WITHOUT BLEEDING AFTER CESAREAN: A REVIEW OF 3 CASES

ADNAN İNCEBIYIK¹, NELSE GUL HILAL¹, AYSUN CAMUZCUOĞLU¹, EKREM KARAKAŞ², HALEF AYDIN¹ MEHMET VURAL¹, HAKAN CAMUZCUOĞLU¹, AVNI KILIC¹

¹Harran University School of Medicine, Gynecology and Obstetrics Clinic, Sanlıurfa, Turkey - ²Harran University School of Medicine, Department of Radiology, Sanlıurfa, Turkey - ³Sanlıurfa Obstetrics and Gynecology Hospital, Gynecology and Obstetrics Clinic, Sanlıurfa, Turkey

[Approccio conservativo per cause di deiscenza uterini senza sanguinamento dopo cesareo: cases report]

ABSTRACT

In recent years there has been a continuous increase in cesarean rates worldwide. Parallel to this increase the probability of complications due to cesarean has increased. While among these complications uterine dehiscence is a rare situation; it may cause hemorrhage, pelvic pain, lower abdominal sensitivity, dysmenorrhea and menstrual problems. Diagnosis may be made using methods such as ultrasonography, magnetic resonance imaging and computer-aided tomography. Treatment includes re-suturing the uterine incision line, hysterectomy or conservative treatments accompanied by broad-spectrum antibiotics administration. This paper examines the conservative treatment and results of 3 cases of uterine dehiscence after cesarean.

Key words: Cesarean, computer aided tomography, conservative treatment, magnetic resonance imaging, uterine dehiscence, ultrasonography.

Received April 29, 2013; Accepted May 06, 2013

Introduction

In recent years there has been a continuous increase in the rate of cesareans performed worldwide. Parallel to this increase the probability of confronting complications linked to cesarean has increased. These complications include infection, hemorrhage and hysterectomy in the short term, as well as long term problems such as uterine scar rupture, placental adhesion anomalies, chronic pelvic pain, pelvic adhesion and menstrual disorders. While uterine dehiscence is a rare entity among these problems, the frequency changes between 0.06-3.8%. If uterine dehiscence leads to severe infection and unstable clinical condition laparotomy should be performed. During laparotomy uterine incision line re-suturing may be attempted. However in the presence of endomyometritis and abscess, hysterectomy is recommended. This paper examines the treatment and results of 3 patients, admitted to our Department just complaining abdominal pain, presenting with stable hemodynamic parameters, no severe sign of infection and according to imaging techniques a open full-thickness uterine incision line, who did not undergo to surgery but were treated with a conservative approach.

Case Reports

Case 1

23-year old G1P1L1A0 (G: gravid, P: parity, L: live birth, A: abortus) woman who underwent a cesarean at another centre 8 days previously due to non-progressive labor, applied to our clinic complaining abdominal pain. The patient’s general situation was good, conscious, cooperative, soft abdomen; clean incision line, involution normal, and lochia rubra were observed. Blood pressure: 100/60 mmHg, pulse 88/min, and temperature 37.1 °C. Abdominal ultrasoundography showed the uterus to be postpartum; in the lower segment of the uterus near the incision region a hypoechoic area about 17 x 45 mm was interpreted as uterine dehiscence. Bilateral ovaries looked normal.
while there was no free fluid in the pouch of Douglas (Figure 1A). Magnetic resonance imaging (MRI) found the uterus anterior wall defect to be compatible with uterine dehiscence (Figure 1B). Other than C reactive protein (CRP): 7.27 mg/dl (0.01-0.05), erythrocyte sedimentation rate (ESR): 62 mm/hr and leukocyte: 12440/mm³ (4300-10300) laboratory results were normal. The patient was diagnosed with postpartum uterine dehiscence, given two antibiotics intravenously (ceftriaxone: 2 x 1 gr, ornidazol: 2 x 500 mg) and brought to service for observation. The patient was monitored every other day for infection markers (CRP, leukocyte) and with abdominal ultrasound. Ultrasonography monitoring of the patient found the incision line was completely closed in accordance with uterine involution on the 23rd day in service (Figure 1C). With monitoring showing no fever, CRP of 0.7 mg/dl, ESR 11 mm/hr, leukocyte 8500/mm³ and uterine incision closed; on the 25th day the patient was discharged. Ten days later at a checkup the patient had no complaints and abdominal ultrasonography showed uterine involution within normal limits and a normal incision line. The patient was monitored for 6 months and had no problems.

Case 2

A 33-year old G3P2L1 patient who had a cesarean 7 days before at another centre due to placenta ablation, applied complaining abdominal pain. Abdominal ultrasonography showed a 17 x 35 mm area on the uterine incision line compatible with uterine dehiscence. MRI confirmed the presence of dehiscence. The patient had no fever, no sign of bleeding, soft abdomen and was in a generally stable condition. The patient underwent dual antibiotics therapy (ceftriaxone: 2 x 1 gr, ornidazol: 2 x 500 mg) and taken to service for observation. The patient was monitored for infection markers (CRP, leukocyte) and abdominal ultrasonography every second day. Other than CRP: 4.5 mg/dl, ESR: 28 mm/hr and leukocyte: 12500/mm³, all laboratory results were normal. On the 20th day under observation ultrasonography showed the incision line completely closed in accordance with uterine involution. On the 22nd day the patient was discharged with no fever, CRP: 0.6 mg/dl, ESR: 12 mm/hr, leukocyte 7550/mm³ and uterine incision line fully closed. The patient was monitored for 8 months and had no problems.

Case 3

A 27-year old G6P5L5A1 woman had a term cesarean due to previous cesareans 10 days before outside our center. She complained of pain in the cesarean area, redness and discharge. Abdominal ultrasonography showed a 15 x 37 mm loculated fluid domain (abscess? hematoma? dehiscence?) on the uterus incision. Due to suspicion of abscess computer-aided tomography (CT) was requested. CT showed a 10 x 36 mm wall defect coincident with the uterus incision line (Figure 2). The patient was diagnosed with uterine dehiscence and taken for observation. With no fever, no sign of hemorrhage, soft abdomen and generally stable condition, the patient was given dual antibiotics therapy (ceftriaxone: 2 x 1 gr, ornidazol: 2 x 500 mg) and brought to service. The patient was monitored every other day for infection markers (CRP, leukocyte) and with abdominal ultrasound. All laboratory results, other than CRP 2.1 mg/dl, ESR 25 mm/hr and leukocyte 13300/mm³, were normal. There was no bacterial production from a culture of a sample of skin wound discharge. On the 17th day of observation ultrasonography showed the incision line completely closed appropriate to uterine involution. When monitoring showed no fever, CRP 0.5 mg/dl, ESR 14 mm/hr, leukocyte 11160/mm³ and the uterine incision line closed, on the 19th day of observation the

Figure 1: A:Uterus near the incision region a hypoechoic area about 17*45 mm (ultrasonography), B: uterus anterior wall defect to be compatible with uterine dehiscence (MRI), C: incision line was completely closed in accordance with uterine involution (ultrasonography).

Figure 2: 10*36 mm wall anterior defect coincident with the uterus incision line (CT)
patient was discharged. In 18 months of follow-up the patient had no problems.

Discussion

Uterine dehiscence, defined by the opening of the incision line after cesarean, is a rare clinical condition. Risk factors for uterine dehiscence include; nulliparity, diabetes, emergency surgery, infection, uterine incision in very low segment, suture technique, reaction to suture material, hematoma on the uterine incision line and retrovesical hematoma(5,6,7,8).

In the early postpartum period, partial or complete opening of the uterine incision line leaves uterine veins open and erosion may be related to heavy postpartum bleeding(5). Of the 3 patients included in our study none showed any signs of heavy bleeding. The reason may be our patients’ uterine dehiscence was seen in the late postpartum period, when hemostasis and uterine involution may have prevented heavy bleeding.

Other than postpartum bleeding, other symptoms that suggest uterine dehiscence include pelvic pain and suprapubic sensitivity due to endomyometritis(5). Complaints of pelvic pain after cesarean was reported from our 3 patients.

In uterine dehiscence patients with signs of fulminating infection direct laparotomy is recommended(5). Uterine dehiscence causes a direct link to form between the uterine cavity and the abdominal cavity. There is a risk that due to this opening any infection may spread to the abdominal cavity. For this reason, patients undergoing conservative treatment should start a broad-spectrum antibiotics therapy to prevent endomyometritis or intraabdominal abscess. As no sign of fulminating infection was observed in our 3 patients, a conservative approach was taken and broad-spectrum antibiotic treatment was begun.

To diagnose uterine dehiscence imaging techniques such as ultrasonography, MRI and CT may be used. On ultrasonography in the area of the uterine incision in the endometrial cavity it is linked to a full-thickness hypoechoic area; on T2-weighted MR images a shining fluid on the uterine incision line is typical of uterine dehiscence. Additionally hematoma and arteriovenous malformations on the uterine incision line should be considered. Doppler ultrasonography with no flow may exclude arteriovenous malformations and be interpreted as uterine dehiscence(5).

After ultrasonography indicated uterine dehiscence, 2 of our 3 patients were given MRI and 1 was given CT scan due to suspicion of abscess, to confirm diagnosis.

In conclusion, for treatment of uterine dehiscence after cesarean; in cases with no active hemorrhage, generally stable condition and no evidence of severe infection, conservative treatment accompanied by broad spectrum antibiotherapy is an appropriate treatment to be considered.

References


Request reprints from: ADNAN INCEBIYIK MD, Assist. Prof. Dr. Harran University School of Medicine Gynecology and Obstetrics Clinic Yenisehir Campus 63000, Sanliurfa (Turkey)