

Successful pregnancy outcome in a case of gravid uterus in an incisional hernia leading to burst abdomen.

C Dubey, N Gupta, C Gupta, R Arora, P Sachdeva

Citation

C Dubey, N Gupta, C Gupta, R Arora, P Sachdeva. *Successful pregnancy outcome in a case of gravid uterus in an incisional hernia leading to burst abdomen..* The Internet Journal of Gynecology and Obstetrics. 2009 Volume 13 Number 1.

Abstract

A case of a 26 year old G₃P₂AL₂ with previous 2 LSCS with incisional hernia containing gravid uterus. She developed ulceration of abdominal wall at 29 weeks followed by burst abdomen at 35 weeks gestation. An emergency LSCS was done with repair of hernia. A healthy baby girl was delivered.

INTRODUCTION

Incisional hernia containing a gravid uterus is a rare complication of pregnancy¹⁻⁸. Occurrence of burst abdomen in such a hernia is rarer still^{3,7}. Other complications like incarceration of uterus with strangulation, necessitating emergency management have been reported. Incarceration may lead to abortion, preterm labour, dysfunctional labour and fetal death.

CASE REPORT

A 26 year old G₃P₂AL₂ with previous 2 LSCS was referred to our antenatal clinic at 29 weeks gestation with an incisional hernia containing gravid uterus. There was no history of any pain, bowel or urinary complaints. Her first LSCS was done for transverse lie 6 years ago. The child had a ventricular septum defect and was planned for surgery at 12 years of age. The second LSCS was done 2 years ago for fetal distress. The 2 year old child was healthy. There was no history of wound infection following either LSCS.

She was of average build and nutrition. General physical examination was normal. Her pulse was 80/minute, regular, BP was 110/70 mm Hg and she was afebrile. Cardiovascular and respiratory systems were normal on examination.

On abdominal examination the skin over the infraumbilical midline was ulcerated, with a 4X8 cm ulcer. The surrounding skin was edematous, ulcerated, puckered and peeling off. [Figure 1]

Figure 1

Figure 1: Ulcerated skin over incisional hernia containing gravid uterus.



The uterus was enlarged to 28 weeks size. The FHR was 146/minute, regular. The rectus sheath was deficient over the uterus with only the skin overlying it.

Her routine investigations which included hemogram, blood group and Rh type, VDRL, HIV status, HbsAg, glucose challenge test, urine routine, microscopy and culture were normal. Ultrasound showed a live fetus of 29 weeks maturity, in breech presentation, with no gross congenital malformation. The liquor was adequate and placenta was anterior and in upper segment.

Surgeon's and dermatologist's opinion was taken. Patient was admitted and local dressing with saline and antiseptic solution was done twice daily. The ulcerated area started

Successful pregnancy outcome in a case of gravid uterus in an incisional hernia leading to burst abdomen.

healing and the surrounding edematous and puckered skin also became healthier.

The patient was discharged and given follow-up appointment in antenatal clinic after 2 weeks. She presented with pain and a reformed ulcer on the hernia site few days later and was admitted again. She was managed conservatively with bed rest and saline dressings. At 35 weeks, the wound gave way in a 4X2 cm area resulting in a burst abdomen, with the uterine surface directly exposed to the exterior. [Figure 2]

Figure 2

Figure 2: Burst abdomen with uterus directly exposed to exterior.



Caesarean section was planned after discussing baby's prognosis with pediatrician. The associated risks of prematurity of baby were explained to the patient and her husband and an informed consent taken. Intravenous ceftriaxone and

metronidazole were given preoperatively and patient taken up for LSCS under combined spinal epidural anesthesia. Abdomen was opened along the previous midline vertical scar, entering through the burst area. No gut or omental adhesions were encountered. A 2.1 kg baby girl was delivered by a lower segment caesarean section as breech, with an apgar score of 9, 9, 9. Bilateral fallopian tubes were ligated with modified Pomeroy's technique and cut segments sent for histopathology. The unhealthy redundant hernial sac and the skin overlying it were excised till the edge of rectus sheath was reached on both sides. Rectus sheath was mobilized and closed with No. 1 prolene, continuous suture. Overlying skin was closed with interrupted nylon sutures. Antibiotics ceftriaxone and metronidazole were continued for a week. Dressing was changed on the third day and

wound looked healthy. Stitch removal was done on the tenth postoperative day and the wound was healthy. Patient was discharged with the advice to avoid cough, constipation and lifting of heavy weights for 6 months. On follow-up 2 weeks later wound was healthy and healed. [Figure 3]

Figure 3

Figure 3: Healed wound after repair.



COMMENTS

Burst abdomen with an incisional hernia containing gravid uterus has been reported only twice prior to our case^{3,7}. In our case the burst occurred at 35 weeks gestation. An LSCS with simultaneous hernia repair was decided after considering the risks of continuing pregnancy. The possibility of wound sepsis and intraperitoneal infection with continuing pregnancy appeared greater than an LSCS at 35 weeks, with a reasonably good outcome for baby being anticipated.

The decision of doing a hernia repair without a mesh was taken by the general surgeon who was called for the operation. Chances of wound infection would have increased with a mesh. The patient did not have wound infection following her previous 2 caesareans. The type of suture material used for rectus sheath closure during previous surgeries is not known as both were performed in a different hospital. Poor surgical technique and use of absorbable suture material for rectus sheath closure could have been factors contributing to development of hernia in this patient.

References

1. Malhotra M, Sharma J B, Wadhwa L, Arora R: Successful pregnancy outcome after Cesarean section in a case of gravid uterus growing in an incisional hernia of the anterior abdominal wall. *Indian J Med Sci*; 2003; 57:501-3.
2. Deka D, Banerjee N, Takkar D: Incarcerated pregnant

Successful pregnancy outcome in a case of gravid uterus in an incisional hernia leading to burst abdomen.

- uterus in an incisional hernia. *Int J Gynaecol Obstet*; 2000;70:377-9.
3. Van Rooyen AJ, Cominos DC, van der Walt A: Pressure necrosis of a caesarian section scar with exteriorization of the gravid uterus. A case report. *S Afr Med J*; 1977;51:666-8.
 4. Daro F, Makinde OO, Lawal OO: Gravid uterus in an anterior abdominal wall hernia of a Nigerian woman. *Int J Gynaecol Obstet*; 1990;32:377-9.
 5. Banerjee N, Deka D, Sinha A, Prasad R, Takkar D: Gravid uterus in an incisional hernia. *J Obstet Gynaecol Res*; 2001;27:77-9.
 6. Makama JG, Odigie VI, Yusufu LM, Ameh N: Herniated gravid uterus: clinical course and result of treatment. *Ann Afr Med* 2007; Dec;6(4):197-9.
 7. Sahu L, Bupathy A: Evisceration of pregnant uterus through the incisional hernia site. *J Obstet Gynaecol Res*; 2006 Jun;32(3):338-40.
 8. Rao Radha S, Shankaregowda HS: A case of herniated gravid uterus through a laparotomy scar. *Ind J Med Sci*; 2006 Apr;60(4):154-57.

Successful pregnancy outcome in a case of gravid uterus in an incisional hernia leading to burst abdomen.

Author Information

Chandan Dubey, MD, MRCOG

Assistant Professor, Department of Obstetrics and Gynecology, Maulana Azad Medical College and Lok Nayak Hospital

Neha Gupta, MD.

Senior Resident, Department of Obstetrics and Gynecology, Maulana Azad Medical College and Lok Nayak Hospital

Chanchal Gupta, DNB

Senior Resident, Department of Obstetrics and Gynecology, Maulana Azad Medical College and Lok Nayak Hospital

Raksha Arora, MD

Professor, Department of Obstetrics and Gynecology, Maulana Azad Medical College and Lok Nayak Hospital

Poonam Sachdeva, DGO DNB

Senior specialist, Department of Obstetrics and Gynecology, Maulana Azad Medical College and Lok Nayak Hospital