A Rare Case of Herniation of Gravid Uterus

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Abstract

Incisional hernia is a frequent complication of abdominal wall closure and the management of pregnancy with a large incisional hernia with gravid uterus in its sac is challenging and requires a multidisciplinary approach. We report a case of 25yr old manual laborer, gravida 3 Para 1 live 1 abortion 1 who presented with an over distended abdomen and pendulous belly at 38 weeks of gestation. Examination revealed gravid uterus that herniated through the incisional hernia. Multiple erosions with crusting were seen over the abdomen. She subsequently had elective lower segment caesarean section and bilateral tubal ligation with repair of the hernia. She had uneventful post-operative recovery.
INTRODUCTION

The presence of gravid uterus in an anterior abdominal wall incisional hernia is very rarely encountered in obstetric practice. It has serious maternal and fetal risks such as incarceration, strangulation, preterm labor, accidental hemorrhage, intrauterine growth restriction, intrauterine fetal death, scar dehiscence and rupture of the lower uterine scar\(^1\)\(^-\)\(^5\). As pregnancy progresses, the risk of incarceration increases and can lead to strangulation of uterus and subsequent complications. Here, we report a case where the patient presented with herniated gravid uterus at 38 weeks gestation.

CASE REPORT

A 28-years-old Hindu Indian woman presented to the outpatient department of Prathima Institute of Medical Sciences, Karimnagar in January 2014 with 38 weeks of gestation of her third pregnancy with undue distention of the abdominal wall. She is a gravida 3 Para 1 live 1 abortion 1. Her 1\(^{st}\) pregnancy was an abortion at 16wks following which she had an appendicectomy via paramedian vertical incision, 5yrs ago. She had wound infection which required secondary suturing. She conceived 1yr after the surgery. She had over distension of the abdomen and ulceration of the skin (probably incisional hernia) for which elective caesarean section was done. She didn’t go for follow up. She became pregnant after 4yrs which is the present pregnancy. She had discomfort, dragging sensation in the abdomen and bulging of the lower abdomen which subsided on lying down during the 2\(^{nd}\) pregnancy and also in the present one.

On general physical examination, she was moderately built and nourished. She was afebrile with stable vital signs. Her lower abdomen was distended mainly below the umbilicus, which also showed a broad vertical right paramedian scar and thinned out skin with multiple erosions. (Fig – 1)

Fetal parts were easily felt with the fetus in breech presentation. Haemogram and urine examination were normal. Ultrasound scan revealed the uterus to have herniated in the incisional hernia of the anterior abdominal wall and a single live fetus in longitudinal lie with breech presentation with average liquor with no gross congenital abnormalities and with placenta in the upper uterine segment.

Elective caesarean section was planned in view of breech presentation and previous cesarean section. Right paramedian incision was given. Uterus was acutely anteverted. So the incision was extended above the umbilicus and the uterus exteriorized. (Fig-2) Lower segment caesarean section was done and a healthy live male baby with 3.5kg birth weight with APGAR 7/10 at 1 minute and 9/10 at 5 minutes was delivered. Bilateral tubal ligation was done. The redundant abdominal wall was removed. There was no evidence of rectus sheath in the vicinity of the incision. Anatomical repair was done with 1-0 prolene continuous locking suture. Tension suturing was done. Post operatively injection ceftriaxone was given for 3days followed by tablet cefixime for 7days. Suture removal was done after 15days. Both the patient and her baby were doing well at the 6-week follow-up visit. No complications were noted at the 6-month follow-up examination.

DISCUSSION

The presence of a gravid uterus in an anterior abdominal wall incisional hernia can pose a serious obstetric situation. Herniation of gravid uterus has been reported sporadically as incisional hernia and umbilical hernia of pregnancy. A search of the literature reveals only 15 reported cases of anterior abdominal wall hernias com-
 complicated by pregnancy, of which 8 developed incarceration with or without subsequent strangulation.\textsuperscript{[1-4, 6-9]}

There is dilemma in the management of incisional hernia in pregnancy because no evidence-based approach has been described in literature. It depends upon the period of gestation. Conservative management such as manual reduction and use of abdominal binder until term has been applied with unreliable success.\textsuperscript{[1, 3, 5, 10]} Additionally, antepartum hernial repair has also been undertaken in few women in 2\textsuperscript{nd} and 3\textsuperscript{rd} trimester while allowing for normal vaginal delivery at term.\textsuperscript{[2, 3]}

Some authorities recommend postponing herniorrhaphy until post-partum because the enlarged uterus itself and laxity of the abdominal wall may hinder optimal repair and enlargement with advancing gestation may further disrupt the repair.\textsuperscript{[5]} Thus, delayed mesh repair at 6-8 weeks post-partum has been described as an option considering the risk of bleeding and infection.\textsuperscript{[11]} However, it can be performed during pregnancy if there is evidence of gross incarceration, strangulation or skin necrosis.\textsuperscript{[2, 10]} Normal vaginal delivery has been accomplished in pregnant patients with uterus lying in a hernia.\textsuperscript{[2, 10]} It may be difficult to perform LSCS in some patients due to unusual shape and contour of the uterus and an inapproachable lower segment; for these patients, a classic approach may be better.\textsuperscript{[3, 4]}

Many studies in the literature have focused on the role of type of repair in patients with hernias. Little is written about the fate of the abdominal wall subjected to pregnancies following repair of ventral hernias, since the majority of women having these hernias repaired are past the child-bearing age or are warned off further pregnancies by their doctors or undergo tubal ligation with the hernia repair. Three basic methods have emerged for repair of abdominal incisional hernias - re-suture, shoelace darn repair, synthetic non-absorbable mesh repair. The shoelace darn repair is superior to the other two methods for the following reasons:

1. Quick, easy, extra-peritoneal method that simply returns the unopened hernial sac and its contents to the abdominal cavity
2. The repair restores the functional anatomy of the abdominal wall.
3. Tension free repair.
4. Minimal suture material requirement.\textsuperscript{[12]}

Prosthetic mesh tends to contract and harden and may seriously interfere with abdominal expansion in pregnancies so these hernias are probably best repaired by the Shoelace technique.\textsuperscript{[13]}

Recently, successful laparoscopic hernioplasty during pregnancy was reported. More data is required to standardise such procedures in pregnancy and their prognosis in subsequent pregnancies.\textsuperscript{[4]}

**CONCLUSION**

Pregnant women with uterus lying in incisional hernia needs individualized care and a multidisciplinary approach. Currently there are emerging management options such as the use of mesh and laparoscopy.

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