Gravid Uterus in Neglected Incisional Hernia with Skin Defect—A Clinical Challenge

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Abstract Incisional hernia during pregnancy with whole of gravid uterus as the content of the hernia sac is a rare occurrence. When such hernia is associated with skin defect over the sac, the management gets complicated. Very few such cases are reported in the literature. There is no consensus on the management of these cases in the available literature. Here, we are reporting two such cases managed in different ways and reviewed the literature.

Level of Evidence: Level V, Clinical cases

Keywords Burst abdomen · Incisional hernia · Gravid uterus · Skin defect

Introduction

Pregnancy associated with incisional hernia with whole of the gravid uterus as the content of the sac is a rare occurrence [1]. About 18 cases have been reported in the literature [2]. Association with a skin defect over the sac is still rarer. When the skin defect is bigger, it is a challenge to continue the pregnancy as the risk of rupture and bleeding is high. Here, we are reporting two such cases managed in different ways and reviewed the literature.

Case Report

Case 1: A young 24-year-old lady was referred to us with 26 weeks pregnancy with incisional hernia with gravid uterus as the content of the hernia sac with a skin defect measuring

15×15 cm (Fig. 1) for skin cover. The patient had undergone emergency appendectomy 2 years back through right paramedian incision. The patient was hemodynamically stable. Wound had healthy granulation tissue with erythematous skin around the wound. Hernia could not be reduced. Ultrasonography revealed live fetus in the sac. We did elective hysterotomy, evacuation of the contents, and reduction of hernia sac and repair by preperitoneal polypropylene mesh. The skin was debrided and closed primarily. No post operative complications.

Case 2: A young 23-year-old lady presented to us with incisional hernia with 8 months of pregnancy with gravid uterus as contents of the hernia sac. The patient was clinically stable. Patient had previous history of LSCS twice through lower midline incision. There was an eschar measuring 5×5 cm over the sac (Fig. 2). The contents of the sac could be reduced. The wound was managed with regular dressings with hospitalization and bed rest. The patient was taken for emergency LSCS at 8 months 21 days of pregnancy as the omentum herniated through the wound. A live healthy baby was delivered and a simultaneously hernioplasty was done by preperitoneal polypropylene mesh. The wound healed uneventfully.

Discussion

Incisional hernia with gravid uterus as the content of the hernia sac is a rare and hazardous condition. [1]. It is a serious obstetric situation and is associated with potential complications like intrauterine growth retardation, accidental hemorrhage, intrauterine death, rupture of lower segment of uterus, and burst abdomen.[3, 4]. Excessive stretching of skin causes avascular necrosis [5] and this association is still rarer. All the reported cases are from developing countries. There is no consensus over the management of this condition [3] and there

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Fig. 1 Clinical picture showing incisional hernia with gravid uterus inside with a skin defect of 15×15 cm with excoriation of skin

is still dilemma [4]. The management depends upon the period of gestation [4, 5]. As the pregnancy progresses the risk of incarceration increases. The enlarged uterus and associated changes in anterior abdominal wall hinder optimal herniorrhaphy [6]. Conservative management with rest, abdominal binder is preferable till full term [1, 4, 7, 8] and hernia repair after delivery is treatment of choice [8]. Herniorrhaphy can be performed during pregnancy only if there is risk of morbid incarceration or the skin is necrosed, otherwise it can

Fig. 2 Clinical picture showing incisional hernia with gravid uterus inside with eschar of 5×5 cm with excoriation of skin

be postponed until delivery as the enlarged uterus may interfere with healing [1, 7]. The case 1 had a large defect with full thickness abdominal wall loss exposing uterus increasing the risk manifolds. Although the wound could have been managed temporarily by collagen dressings, negative pressure wound therapy or skin graft to tide over the situation. But there is no existing literature about the use these methods in such cases. The authors argue that the risk of impending rupture overweighed the benefits of continuation of pregnancy, which justifies termination of pregnancy in the interest of mothers' life. The case 2 had a smaller defect with eschar covering the wound which made it look deceptively safer to continue the pregnancy with rest and dressings but omental herniation forced us to make a decision of emergency caesarian. We managed hernias in both the cases in the same stage with preperitoneal polypropylene mesh and skin was closed primarily after a good debridement. We feel simultaneous hernioplasty is a safe option as we did not encounter any postoperative complications. We may anticipate more patients with pregnancy-associated incisional hernia, considering the global increase in caesarian sections [4].

Conclusions

Gravid uterus in incisional hernia with skin defect is an exceedingly rare occurrence, and the management is decided by period of gestation. Simultaneous hernioplasty with caesarean section is safe.

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