

A Rare Case of Full Term Pregnancy with Incisional Hernia with Gangrenous Abdominal Wall

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Abstract: An unusual case of 30 year female, G3P2L1 with full term pregnancy with incisional hernia due to previous caesarean section came to emergency with gangrene of anterior abdominal wall. She had obstetric history of LSCS for first pregnancy at periphery for obstructed labour. 5 year back, followed by VBAC in subsequent pregnancy, male child 3 year back at periphery. Now she came to our emergency with complaint of pain abdomen. She delivered a full term male child per vaginally, during delivery abdominal wall burst and she was shifted to OT and resection of gangrenous anterior abdominal wall with primary closure done. Patient was discharged on 7th postoperative day with satisfactory condition.

1. Introduction

Incisional hernia with herniation of bowel loops is unusual after previous caesarean section and it is very uncommon condition in obstetric practice. But with further pregnancy due to increased abdominal pressure, herniation through previous scar may occur along with anterior abdominal wall necrosis, but very rare. It may pose a very serious risk to mother and foetus if it is associated with herniation of uterus. Intestinal ischemia, obstruction and gangrene may also occur that may requires urgent laparotomy.

2. Case Report

A 30 years old un-booked, G3P2L1 presented at 37 weeks gestation, with 6 hours history of labour pain. She had an emergency lower segment caesarean section 5 year back at private hospital at periphery, due to obstructed labour. This was complicated by wound infection and healing by secondary intention. She noticed blackish discolouration of abdominal skin around umbilicus along with ulceration for 20 days.

Examination revealed young lady in intermittent pain-full distress. She had Hb 12.3 gm, TLC 16500/cumm, blood urea 60mg%, serum creatinine 0.76mg%, LFT was in normal range. Pulse rate was 98/min regular, blood pressure was 110/70 mm of Hg and respiratory rate was 20/ min. patient's chest was clear and cardiac examination was normal. Per abdominal examination showed midline sub-umbilical scar. There was incisional hernia defect approximately 10 cm in width and 12cm in length. Two necrotic ulcers along with gangrenous patch was present at hernia site above and below umbilicus. Symphysial-fundal height was 40 cm. Lie and presentation could not be assessed. Foetal heart rate was 136/min, regular. Vaginal examination revealed cervix 8 cm dilated and fully effaced. Membrane was absent and liquor was clear. Vertex was presenting part and it is at +2 stations.

A diagnosis of active phase of labour in multiparous woman, with previous caesarean section, with huge incisional hernia along-with gangrene of anterior abdominal wall was made. She delivered a full term live male child of weight 2.4 kg per vaginally. During labour she had burst abdomen through

gangrenous wall with bowel loops herniating out. General surgery team on call was called and surgery for burst abdomen planned. Under spinal anaesthesia, resection of gangrenous anterior abdominal wall done, peritoneal cavity washed with normal saline and abdominal wall closure was done in midline with polydioxanone sodium sutures in single layer. Postoperative period was un-eventful. Patient was discharged on postoperative day 7, with healthy suture line.



Figure 1: Before repair



Figure 2: After repair

3. Discussion

In pregnancy, ventral abdominal hernias are conceivably and enigma because of their rare occurrence. Occasionally they do become genuine obstetric problem, if complications such as hernia resulting to incarceration, strangulation or spontaneous rupture^{1,2,3}. A number of factors may contribute to its rarity in pregnancy because size of uterus is too large to enter in hernial sac, but bowel loops may herniate in the sac². Risk factors for incisional hernia may be patient related or surgical technique related. Patient factors include obesity, wound infection, poor nutritional status, anaemia and postoperative infection^{1,3,4}. Surgical factors include midline vertical incisions, emergency surgeries, faulty surgical techniques and use of inappropriate suture material to close rectus sheath^{1,3}. Patient in our report had combination of both these factors. Since the first CS was done in private hospital of periphery as an emergency procedure and history of postoperative infection. Poor surgical technique and use of inappropriate suture material in rectus sheath cannot be ruled out. Postponing herniorrhaphy until postpartum, because enlarged uterus itself and laxity of abdominal wall may hinder optimal repair and enlargement of uterus with advancing gestation may disrupt the repair⁵. Since our patient had infected gangrenous wall defect, so resection of gangrenous abdominal wall and primary closure was done and delayed mesh repair as an option 6-8 weeks postpartum given to the patient.

4. Conclusion

Pregnant women with incisional hernia should be vigilant and should consult surgeon or obstetrician as soon as possible to prevent complications to occur. Early consultation may reduce the hernial complications such as gangrene, foetal and maternal risk. Proper surgical techniques and postoperative wound care can reduce the risk of incisional hernias.

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