Vertical Midline Incision in Caesarean Leading to Burst Abdomen in Subsequent Pregnancy: A Case Report on A Dreadful Outcome Due to Obsolete Technique

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INTRODUCTION

Midline vertical incision is not recommended these days (unless in some special circumstances). It's associated with plethora of complications like longer post operative period, poor cosmetic result, high rate of fascial dehiscence and incisional hernia. Incisional hernia occurs in upto 20% of patients after abdominal surgery and is most common after vertical midline incision. [1]

CASE REPORT

A 24-year-old pregnant (G_2P_{1+0}) lady with previous caesarean section 2 years back, at 39 weeks of gestation reported to the hospital with pain abdomen on 28/7/21. She was a booked case and her BMI was 19.8kg/m^2. She had history of itching along the previous vertical scar line for two months, which later on led to extensive thick, rough, hyper-pigmented plaque with multiple punched out ulcerations involving abdomen extending 4 cm below the umbilicus to 3cm above symphysis pubis for which she was on topical fusidic and clobetasol cream. Pus culture, gram stain and ZN stain was sent on 1/7/21 and it showed no growth. HPE was done for skin lesion which showed skin with hyperplastic squamous epithelium with focal ulceration, presence of granulation tissue but no granuloma. She had EmLSCS on the day of admission itself, indication being post- caesarean with scar tenderness. She had diastasis recti with thinned out anterior abdominal wall. She delivered a live male baby of 2.6kg and intraoperative period was uneventful. On first post operative day, intestinal loops protruded through punched out ulcer as till now this was guarded by gravid uterus, however primary abdominal scar was intact. Resuscitative management was followed. Gut loops were packed with warm normal saline and were reduced under general anaesthesia with closure of anterior abdominal wall. Throughout the event, patient was hemodynamically stable and afebrile. She was referred to general surgery for further management. Expectant management was followed and her recovery was uneventful.

DISCUSSION

Incidence of burst abdomen is 1-3% in most centres and mostly seen on post-operative day 7 to day 9.[2,3] Mortality in burst abdomen was reported in upto 18% cases.[4] However, in this case it was noticed on post operative day 1 as multiple factors aggravated it like vertical abdominal incision and punched out lesions of skin but primary abdominal scar was intact. Diastasis recti is not rare in post-partum women but in vertical incision there is poorer chance of restoration of anatomy. Since the lesion was detected in third trimester, all this while gravid uterus protected the gut loops from protruding out of the abdomen. Hence, low transverse incision in previous caesarean in this case would have prevented a surgeon's worst nightmare.

REFERENCES

1. Booth AT, Gillen KJ, Visintin I, Ford WF, Kovacs MD, Edgerton CA, George VV, Curran T. Diastasis recti is associated with incisional hernia after midline abdominal surgery. Hernia. 2022 Sep 22.
2. Amini AQ, Khan NA, Ahmad J, Memon AS. Management of abdominal wound dehiscence: still a challenge. Pak J Surg. 2013;29(2):84-7
3. Vardhini KV et. Incidence and risk factors influencing morbidity and mortality in cases of burst abdomen after emergency and elective midline lapartomies. Int Surg J. 2018 Nov;5(11):3471-3477
4. Srivastava A, Roy S, Sahey KB. Prevention of burst abdominal wound by a new technique; a randomized trial comparing continuous versus interrupted X-suture. Indian J Surg. 2004;66(1)

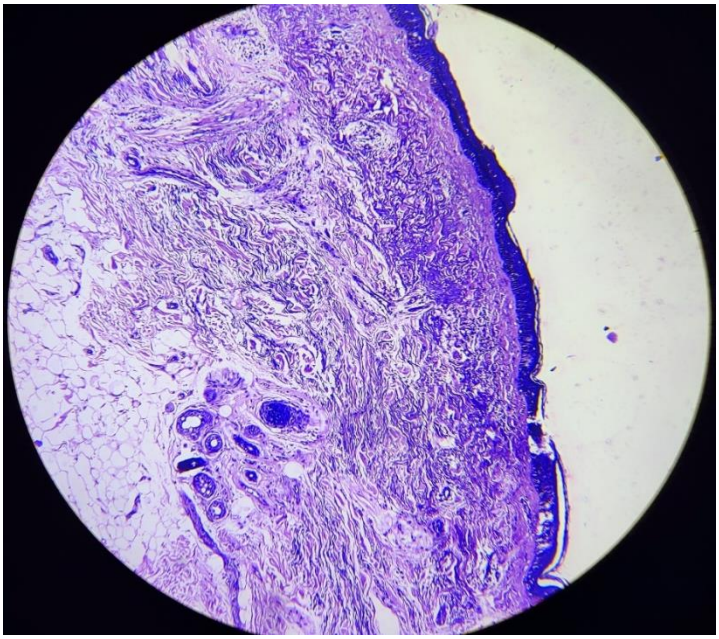

Fig no-1: Skin showing presence of granulation tissue with hyperplastic squamous epithelium

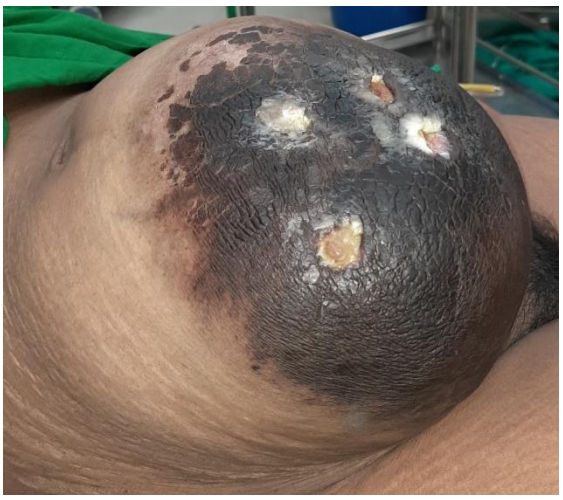

Fig no-2: Lateral view showing pendulous abdomen with hyper pigmented plaque with punched out ulcerations

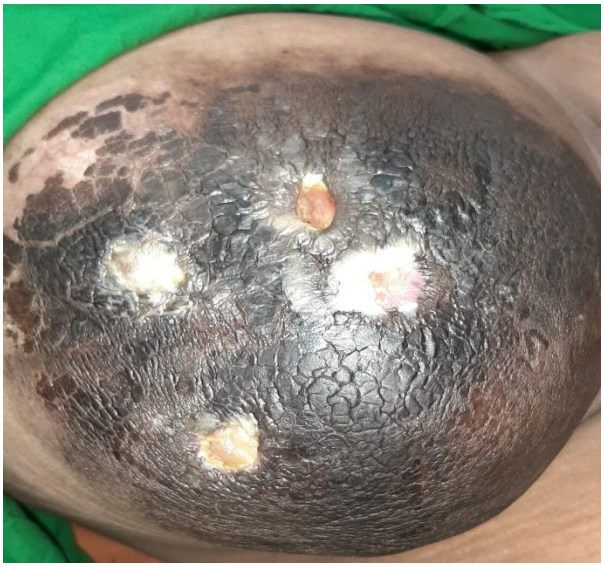

Fig no-3: Anterior view showing impression of gravid uterus through ulcerations

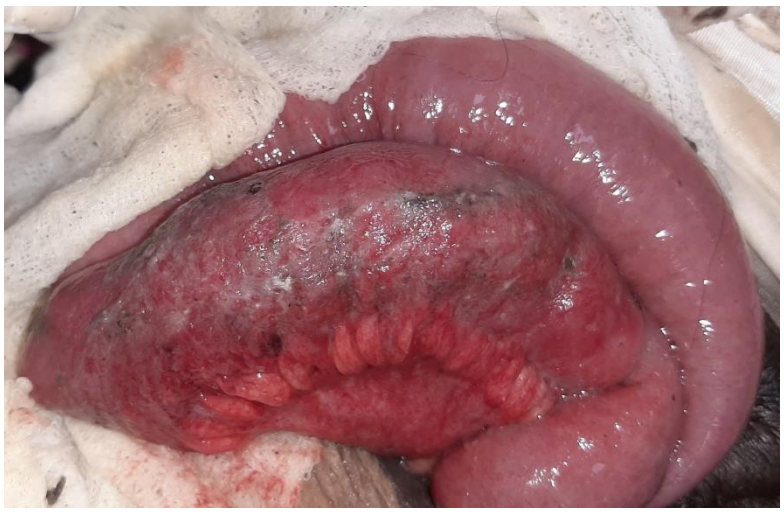

Fig no-4: Day 2 of post-operative day, showing burst abdomen with pressure necrosis on gut wall by gravid uterus