



Post caesarean section wound gaping: Discussing the problem and treatment options

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ABSTRACT: Wound gaping in post operative patients of caesarean section increases morbidity and hospital stay of the patient. It can be dealt with secondary wound closure, mobilisation of local tissue to cover the wound or the raw area can be covered with split thickness skin graft or flap. We present different treatment aspects for dealing with these wounds

Keywords: Caesarean section, wound, Plastic Surgery

I. INTRODUCTION

Caesarean section is one of the most common operations performed in Obstetric Practice. Post Caesarean section wound infection ranges from 3-16%¹. It can result in discharge from suture line, wound gaping and can be devastating resulting in burst abdomen. Most of the problems are treated conservatively². Administration of prophylactic antibiotic does play a role in addressing this issue³. Once wound gaping has occurred, it can be dealt in number of ways. We report 5 different cases of post caesarean wound gaping treated in our department.

II. MATERIAL AND METHODS

5 cases of post caesarean wound gaping were treated in the department of Plastic Surgery at a tertiary care centre between August 2015 and August 2016. All patients were referred from Department of Obstetrics and Gynaecology from our hospital.

Case1: A 22 year female was referred to us for wound dehiscence following lower segment caesarean section(L.S.C.S.). She had developed wound gaping 13 days after LSCS. Examination revealed a 12x8 cm wound in horizontal and vertical extent on anterior abdominal wall with unhealthy granulation tissue. Anaemia and hypoproteinemia was present. Patient was posted for surgery after anesthetic fitness and correction of anaemia and hypoproteinemia.. Slough and devitalised tissue were excised and the superior flap of the wound was raised in the fashion of the abdominoplasty. After sufficient mobilisation, the wound edges were brought closer to each other without tension and closed secondarily over a drain. She was kept with her knees flexed in post operative period. Drain was removed on the 3rd day and patient was discharged on 4th postoperative day with the advice to keep the knees flexed for 3 weeks. There was no wound gaping and sutures were removed after 2 weeks on followup.

Case 2: A 24 year female was referred to us following dehiscence of L.S.C.S wound on day 20. She underwent regular dressing of the raw area and referred after wound was healthy and granulated. Examination revealed a raw area on anterior abdominal wall of size 20x9cm in horizontal and vertical extent. Wound culture was sterile. She was posted for surgery after anesthetic fitness and underwent intermediate thickness skin grafting to cover the raw area. Graft uptake was more than 95%. Small patchy raw areas epithelised and she was discharged on 10th postoperative day.

Case 3: 25 year female patient was referred for post L.S.C.S. wound gaping and presacral bed sore. She developed wound gaping after 7th postoperative day and presacral sore after 12 days of intensive care for uncontrolled hypertension in postpartum period. Examination revealed 8.5x3cm wound on anterior abdominal wall and a grade 4 presacral sore of size 11x9.5cm in horizontal and vertical extent. After anesthetic fitness, she underwent secondary closure of anterior abdominal wall wound and debridement and negative suction wound therapy for presacral wound. After 10 days of therapy there was improvement in granulation. Her anemia was corrected by blood transfusion. Raw area was covered with intermediate thickness skin grafting and patient was discharged 2 weeks after surgery. Graft uptake was almost 100%.

Case 4: 25years female was referred to us following post LSCS wound dehiscence 2 weeks after the surgery. Examination revealed a 10.5x 6 cm wound over the Pfannenstiel incision. She was posted for surgery after anesthetic fitness and wound was closed secondarily after debridement over drain. Sutures were removed after 2 weeks. Post operative recovery was satisfactory without any complications.

Case 5: 24 year female presented with post LSCS wound gaping 18 days after surgery. Examination revealed that the patient was anaemic. There was a 14x8cm raw area over anterior abdominal wall. Negative pressure wound therapy and correction of anaemia was advised and once the wound granulation improved and anaemia corrected, the raw area was covered with split thickness skin graft. There was small amount of graft loss which healed by epithelisation. Patient was discharged on 10th postoperative day.

III. DISCUSSION

Post L.S.C.S. wound infection and gaping may be multifactorial ranging from emergency surgery, rupture of membranes before surgery, prolonged operative time and high body mass index than 25⁴. Applying continuous suture leads to less infection rate compared to taking interrupted sutures⁵.

There are number of reconstructive options for coverage of post L.S.C.S. wound gaping. Healing by secondary intention comes at the base of reconstructive ladder. It is time consuming, used for small wounds⁶ and cosmetically not as good as that by secondary closure. Secondary closure was performed in 2 of our cases. Debridement followed by skin grafts comes next in the reconstructive ladder which was done in 2 out of 5 cases. This is followed by Flaps which can be local, regional or distant. One of our patient required flap planned in abdominoplasty fashion. Reconstructive ladder thereafter has other options in the form of tissue expansion.

Wound debridement is necessary for removing contaminated and devitalised tissue. Negative pressure wound therapy helps in reducing tissue edema and improves granulation. Two of our patients benefited from it. There may be local wound complications after surgery like infection, hematoma, seroma, graft loss, flap necrosis and necrosis along suture line which may require revision. None of our cases required revision surgery.

IV. CONCLUSION

Post L.S.C.S. wound gaping is a challenging subject which increases the morbidity, hospital stay cost of treatment. Aim of this article is to discuss various treatment options available for post L.S.C.S. wound gaping which is helpful for proper and timely referral of these patients. Awareness of the various treatment options and timely referral leads to good functional and aesthetic results.

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Figure 1- Post operative photograph of case 5



Figure 2- Post operative photograph of case 3



Figure 3- Pre operative photograph of case 1



Figure 4- Pre operative photograph of case 4