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EXTENSIVE DEBRIDEMENT OF ABDOMINAL WALL CELLULITIS WITH FOURNIER'SGANGRENE AND SKIN GRAFTING OVER NON HEALING WOUND: CASE REPORT

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ABSTRACT

Abdominal wall cellulitis with Fournier's gangrene is a very serious surgical emergency seen all over the world. With the newer advancement of surgical techniques and critical care medicine, the mortality and morbidity of this disease has come down significantly over a period of time. An early diagnosis including evaluation of predisposing and etiological factors, metabolic and physiological parameters with prompt resuscitation, aggressive surgical debridement, broad-spectrum antibiotic coverage, and continuous monitoring of all the parameters is essential for a good outcome, therefore reducing the high mortality and morbidity of this condition. In this study, we report management of abdominal wall cellulitis with Fournier's gangrene. Our case was a 54 years, nondiabetic, and without any multiorgan failure, who recovered well, but with a stormy postoperative period.

INTRODUCTION

Abdominal wall cellulitis with Fournier gangrene, a relatively rare form of necrotizing fasciitis, is a rapidly progressive disease that affects the deep and superficial tissues of the anterior abdominal wall, perineal, anal, scrotal, and genital regions. The disease involves the rapid spread of severe inflammatory and infectious processes along fascial planes affecting adjacent soft tissue; therefore, the disease may initially go unnoticed or unrecognized as there may be minimal or no skin manifestations in its early stages.

This condition is often associated with general signs of sepsis, rapid tissue destruction, and a high fatality rate of 40%. The spread of inflammation and infection leads to thrombosis of

blood vessels, which in turn causes ischemia and tissue necrosis of the adjacent soft tissue andfascia. The infectious and inflammatory process spreads quickly along the Dartos, Colles, and Scarpa's fascias, allowing for the early involvement of the abdominal wall. Due to initial fascial and subcutaneous involvement, clinicians can miss this disease in its early stages because the overlying soft tissue can often look unremarkable or appear as simple cellulitis. Early diagnosis and treatment of this potentially fatal disease are key as it can easily get misdiagnosed initially asan otherwise benign process.

AIM

To highlight diagnostic & therapeutic feature of cellulitis with Fourier's gangrene & Debridement with skin grafting through case report of an abdominal wall cellulitis with Fourier's gangrene in adult male.

OBJECTIVE

To study clinical manifestations, diagnosis & management of pathological abnormalities arising from abdominal wall cellulitis with Fourier's gangrene to improve patients outcome.

CASE REPORT

54 years male patient came in emergency with complaints of swelling redness at lower abdominal wall & scrotum with wound with pus discharge over scrotum & abdominal wall & fever on & off since 15 days with Known case of Hypertension on regular Rx T. Amlodipine 5mg 1 OD with no any surgical history.

Patient Examined

On local examination – oedematous lower abdominal wall with wound & pus discharge from it, Redness ++, Local temperature raised, tenderness ++, wound over bilateral scrotal region with pus discharge from it. Patient vitaly examined & kept haemodynamically & vitaly stable. Pain management & dressing for pus discharge done. USG of local swelling part done & shows Oedematous anterior abdominal wall extending from groin to lateral abdominal wall upto costal cartilage S/O ?Abdominal wall cellulitis. After investigating the patient marked leukocytosis noted (TLC - 15400/cmm) so needs emergency debridement of abdominal wall cellulitis with Fourniers gangrene. Patient completely investigated for this procedure, Pre operative investigations, Pre anesthesia checkup done & patient posted for surgery.

Surgical management

Patient was treated with IV antibiotics & extensive debridement of abdominal wall cellulitis with Fourniers gangrene was done.

Pre operative

Petient was kept NBM for 8 hours, written surgery & anesthesia consent were taken, IV antibiotics, Antacid, Antiemetic & IV fluids were administered.

Injectable administered are
Inj Piptaz 4.5gm IV TDS
Inj Tigecycline 50mg IV BDInj Pan 40mg IV BD
Inj Emeset 4mg IV TDS
Inj Paracetamol 1gm IV BDIV Fluids.

Operative procedure

Under spinal Anaesthesia

Under all aseptic precautions Foleys catheterization number 14 done Position – supine, painting & draping done.

Multiple incisions taken over abdomen, dead gangrenous skin & Slough removed Pus completely drained & sent for pus culture & sensitivity test.

Debridement of Fourniers gangrene doneWound looks as shown in photos.

Wash given with betadine & Normal saline.

Pack with betadine kept & dressing done.

Post operative management

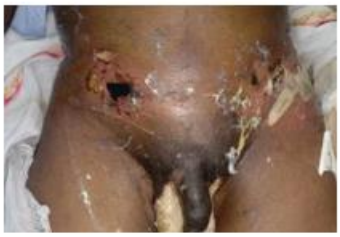
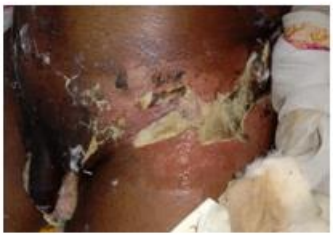
IV antibiotics, Anatcids, Analgesic & IV fluids given , Dressing open After 48 hours & Daily dressing done for about 6 weeks.

After healthy granulation linear wound were closed primarily & non healing, of large surface area wound were posted for skin grafting, sking grafting was done after 6 weeks over woundat lower abdomen & over scrotum.

Skin grafting procedure

Under spinal anaesthesia painting draping done Wound cleaned wash given with betadine graft taken from left thigh region using liquid paraffin & humby's knife.

On admission photos

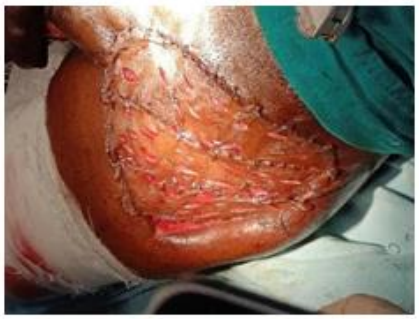



After Extensive debridement photos


After Extensive debridement after 6 weeks of dressing photos



During skin grafting procedure photos




After complete Recovery photos



Graft fixed over lower abdominal wound using skin stapler & mersilk 2-0 and another graft over scrotum using mersilk 3-0.

Dressing done with bactigrass & firm dressing done.

Romovac drain removal & Dressing change were done on POD 10 All stitches were removed on 15th day & patient discharged.

Afterwards patient was came in OPD for follow up – patient was stable & wound was healthy & adviced dressing after perticular time interval after days patient completely recovered n wound complete heals.

DISCUSSION AND CONCLUSION

Abdominal wall cellulitis & Fourniers gangrene is common condition & in majority of cases debridement required, but in this case patient was having multiple non healing wound over abdomen & scrotum so skin grafting & closer this procedure was performed.

After extensive debridement daily dressing was done & after that it takes about 45 days for complete healthy granulation.

After healthy graduation patient & relatives were counseled & posted for skin grafting.

After skin grafting & secondary closure patient recovered completely.

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