

Omentopexy After Sternal Dehiscence And Severe Mediastinitis*

A case report

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Summary:

First patient requiring omentopexy for complete sternal dehiscence with severe mediastinitis at AFIC/NIHD is reported. It was performed after conventional methods and pectoroplasty had failed to help the patient. Omentum was brought into the chest through a tunnel which adequately filled the gap, skin closure was done conveniently. Infection was controlled by abdominal policeman rapidly. Patient had good and rapid postoperative recovery.

Key Words:

Sternal dehiscence, mediastinitis, pectoroplasty, omentopexy.

Introduction:

Sternal dehiscence and mediastinitis are quiet often encountered in our set-up, majority can be tackled with anti biotic and cough lock, few require pectoroplasty and it is very seldom that procedures like omentopexy are resorted. It is for the first time that we have used this procedure and found it to be very useful.

Case report:

Fifty five years old man was admitted on 02/12/96 at AFIC/NIHD complaining of angina CCS II/III, shortness of breath NYHA II. He was a known diabetic for 3 years. Coronary Angiography revealed triple vessel disease, CABGx3 was done, LIMA was grafted to LAD. Post operatively he had high grade fever, shivering with complete dehiscence of sternum, mediastinitis with copious pus discharge. Diabetic

mellitus remained uncontrolled. Pectoroplasty was done. Sternum and dead tissue was removed, washed with saline and betadine, pectoralis major was mobilized and stitched with interrupted sutures in midline. Despite this extensive repair wound gave way on 3rd post operative day, exposing the heart to atmosphere.

Pectoroplasty was replanned but was not possible as the muscle was thin atrophic, fibrotic with wide distance between the edges. Omentopexy was planned, all dead tissues removed, peritoneum opened from the same incision, omentum was pulled up into the chest, adequately filling the large gap in-between and was fixed with vicryl sutures into the suprasternal notch. Rectus abdomenis was closed anterior to omentum leaving adequate tunnel for omentum. Skin closed drains placed. Patient had uneventful recovery 1 well healed wound and was discharged on 12th post op day.

Discussion:

Policeman of abdomen had extended his responsibility into the chest. The greater omentum has two major indications a). An infected recipient site, b). The need for a base for a split thickness skin graft if skin can not be... closed!

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Omentum can be brought into the chest through a tunnel made into the peritoneal cavity. Omentum is grasped and gently brought into the site and fixed with stitches².

Oyama H et al³ had also successfully healed a 48 years old woman, who developed infective mediastinitis with chylo mediastinitis after closure of ASD, with omentopexy and delayed closure of sternum.

Matsugoshi T et al⁴ treated 4 patients with postoperative mediastinitis with omentopexy at Faluca university hospital, 3 had excellent healing whereas one expired due to multiorgan failure. Bilal et al^{5,6} in his approach to sternal dehiscence: How to tackle? has suggested omentopexy as a solution to this problem specially if conventional method and pectoroplasty has failed.

This patient had similar problem. He had severe mediastinitis, his sternum had melted away with infection and was nibbled away in previous attempt to control infection. Pectoroplasty had failed, muscle was atrophic fibrosed shrunken and could not be brought into mid line despite full mobilization.

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