THE CHEST WINDOW IN THE TREATMENT OF EMPYEMA
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INTRODUCTION

- The Chest Window in the treatment of empyema was first described by Eloesser and later by Clagett. It has subsequently been used as a treatment for severe primary empyema, empyema secondary to obstructing lung carcinomas, and following lung resection for cancer.

OBJECTIVE

- To evaluate and compare the use of the Chest Window in the treatment of Empyema in two groups:
  1. Primary Emphyema (PE)
  2. Emphyema Secondary to Obstructing Lung Carcinoma or following a recent pulmonary resection (SE)

METHODS

- A retrospective review was performed looking at all consecutive patients between 1998 and 2005, at one institution, who underwent a Chest Window drainage procedure.

Data was collected for:
- Survival
- Method and success of closure (Surgical vs Secondary intent)

RESULTS

- A total of 35 patients were included in the study. Three patients were lost to follow-up.
  Primary Emphyema (PE): 12 Patients
  Secondary Emphyema (SE): 20 Patients

- There were 5 Post-operative deaths (14%); 4 SE patients (2 septic, 1 hemorrhage, 1 other) and 1 PE patient (sepsis).

- Eight (23%) patients died after discharge from hospital from non-septic causes.
  - Primary surgical window closure was successful in 3 SE patients (mean time to closure 16 mos) and 4 PE patients (mean time to closure 13 mos)

- Window closure by secondary intent occurred in 5 SE and 3 PE patients.
  - 12 thoracic windows in the SE group (9 deaths, 3 alive) and 5 in the PE group (2 deaths, 3 alive) remain(ed), open

CONCLUSIONS

- The Chest Window technique successfully managed the intra-thoracic infection in 84% of the patients.
  - Closure of the window, either by surgery or secondary healing, was accomplished in 47% of patients

- The Chest Window procedure is associated with acceptable post-operative mortality and length of hospital stay.