

Poststernotomy wound Management by Debridement and Pedicle Flaps Reconstruction

N. Antohi^{1,2}, V. Stan², C. Huian², S. Nae²

¹“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

²Emergency Hospital for Plastic Surgery and Burns, Bucharest, Romania

Abstract

Background: Sternal wound infection and sternal dehiscence are very serious, sometimes life-threatening complications of cardiac surgery, which require immediate attention. The mortality rate can reach 50%. During the past 30 years, various flaps for coverage of sternal wounds have been described.

Objective: The authors' objective was to evaluate their 7-year experience with flaps used for coverage of poststernotomy wounds, with an emphasis on flap selection and postrepair complications.

Results: The records of 15 patients were reviewed. The most common coverage techniques were pectoralis major flap (n=5) and rectus abdominis flap (n=4). Four patients had both of these flaps. One patient had a latissimus dorsi flap, and another one had an omental flap. Eight of the 15 patients experienced a local complication; these included seroma (n=2), hematoma (n = 1), infection requiring debridement and antibiotics (n = 2), partial flap necrosis (n = 2) and abdominal hernia (n=1). The perioperative mortality rate was 13.3% (n = 2), and all deaths were attributable to multiple-organ deficiency due to sepsis.

Conclusions: Early debridement and coverage of the remained defects with flaps are the two main principles in the management of poststernotomy infected wounds, especially in situations where rapid wound healing and recovery are extremely important. Individual approach to each patient and proper selection of the method of reconstruction significantly reduces the postoperative morbidity and mortality rate.

Key words: sternal wound, infection, dehiscence, reconstruction, coverage options, muscular flap, musculocutaneous flap

Corresponding author: Sorin Nae, MD

Emergency Hospital for Plastic Surgery and Burns, Bucharest

No. 218, Calea Griviței, District 1, Romania

E-mail: naedaniel@gmail.com

naesorin@yahoo.com