

"Treatment of Mediastinal Surgical Wound Dehiscence in a Patient with Coronary Artery Disease: A Successful Case with Hyperbaric Oxygen Therapy"

Walton Tedesco², Anna Flávia Figueiredo Fernandes², Natália Antunes Souza¹, Paulo Marcel Yoshii², Rogério Aleksander Sakuma¹, Everton Thiarles dos Santos¹.

¹Centro Brasileiro de Medicina Hiperbárica e Lesões Complexas – CEBRALE

²Irmandade Santa Casa de Londrina – ISCAL

Objective: To describe the therapeutic approach and clinical evolution of a male patient with mediastinal surgical wound dehiscence after coronary artery bypass graft surgery.

Method/Case report: Male patient, 50 years old, with diagnoses of severe Coronary Artery Disease (CAD); Previous Acute Myocardial Infarction without ST-segment elevation (NSTEMI); Arterial Hypertension (AH); Obesity and Smoking. Underwent myocardial revascularization surgery (4-bridge CABG) on 11/6/2024. He started follow-up with the dressing committee due to total surgical wound dehiscence (WDC) in the mediastinum. Surgical debridement was opted for on 12/2/2024 due to sternal osteomyelitis. Hyperbaric Oxygen Therapy (HBOT) protocol was started, totaling 31 sessions, associated with antibiotic therapy and conventional dressing with rayon bandage and essential fatty acids (EFA). The evolution of the wound bed was favorable, completing treatment with complete closure of the lesion on 02/05/2025.

Results: The treatment, which included surgical debridement, hyperbaric oxygen therapy, and antibiotic therapy, resulted in complete wound closure within three months.

Conclusion: The combination of surgical interventions and adjuvant therapies, such as hyperbaric oxygen therapy, has been shown to be effective in promoting healing in complex cases of mediastinal wound dehiscence.

Key Words: Wound dehiscence; Myocardial revascularization; Hyperbaric oxygen therapy; Wound healing.



Figure 1 - 06/11/2024



Figure 2 - 19/12/2024



Figure 3 - 13/01/2025

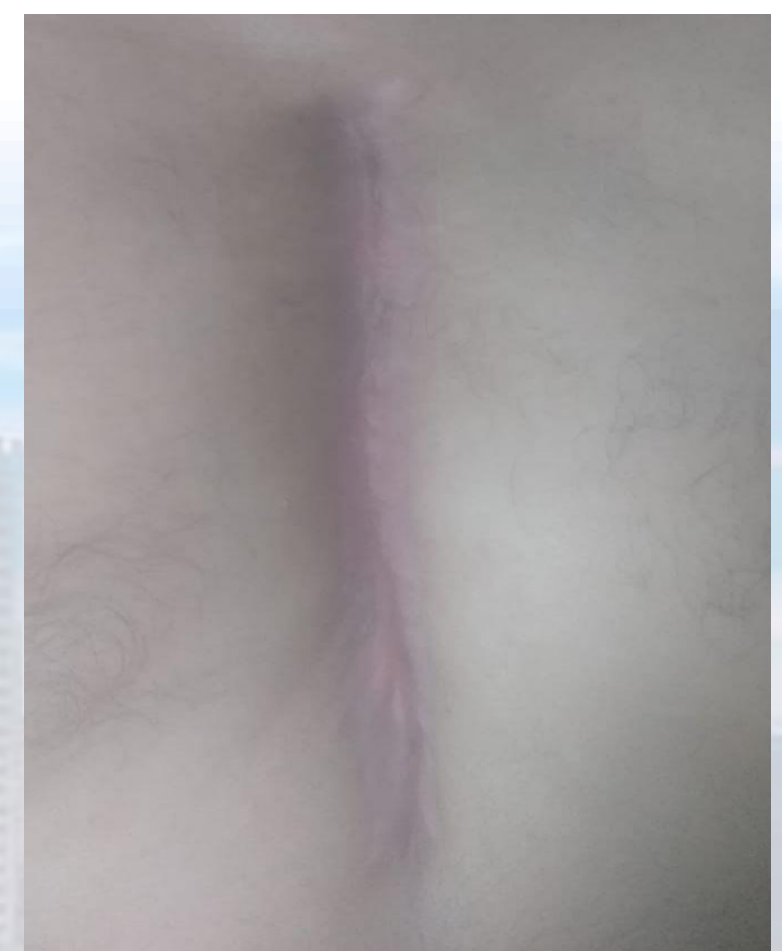


Figure 4 - 17/03/2025