



## Application of a new antioxidant technology in a sternal dehiscence of torpid evolution after cardiac surgery

Osakidetza

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### Objective:

To analyze the effect of a new antioxidant wound dressing\* in the treatment of a sternal dehiscence due to type III mediastinitis of torpid evolution (4 months in evolution). This complication entails a prolonged hospital stay and a mortality of 14-47%.

### Method:

The antioxidant wound dressing was applied in a 61-year-old patient with AHT, DMID with HbA1c8.2 and obesity, among other comorbidities. She had a sternal dehiscence wound after coronary revascularization surgery, with non-viable tissue in the wound bed, moderate exudate, granulation tissue in the lateral areas, hypergranulation in the central area and bone exposure. Previous treatments included moist wound

healing and negative pressure therapy, with no improvement. The antioxidant wound dressing consists of an absorbent matrix of vegetable origin made of carob and a solution with turmeric and acetylcysteine. As a secondary dressing, foam dressing with hydrofiber and silicone was used. At each wound dressing change (every 4-6 days) the type of tissue in the wound bed and the evolution of the size of the wound until closure was recorded. At the beginning of the treatment a debridement of the sloughy tissue was performed.



### Results:

Treatment with antioxidant wound dressing managed to keep the wound bed free from devitalized tissues, increase the granulation tissue and the progress of wound closure, which occurred on week 12 after the beginning of the treatment.



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### Conclusions:

The antioxidant wound dressing allowed the activation of wound healing, improved wound bed conditions and evolution until closure.

\* Reoxcare®