

Review of: "The 'Double Twist' Technique: A Novel Approach to Secure Sternal Closure and Prevent Dehiscence in Obese Patients After Cardiac Surgery"

Daniel Absi¹

1 Fundacion Favaloro Hospital Universitario

Potential competing interests: No potential competing interests to declare.

With respect to this technique, it seems to me to be an acceptable complementary procedure, as a final primary closure in cardiac surgery, in obese patients, to reinforce the closure of a sternotomy that is going to be subjected to greater tension, due to the morphological characteristics of these patients.

The double twist wires use costal cartilage as a support point, and we already know how fragile it is; the ones that really contain it firmly are the simple peristernal wires.

Even the attempt is valid in a cough dehiscence, without infection, although unfortunately in these cases we did not have good results.

More than 60% of these cases developed mediastinitis.

But in those cases where the origin is an infection, in my experience (currently 1900 cases), all osteosynthesis wires should be removed because **these materials maintain the infection.**

- . This led us to develop a treatment protocol:
- 1) Early opening, extensive debridement, resection of bone, compromised cartilage, and osteosynthesis wires.
- 2) About a week of multiple healings.
- 3) Sternotomy repair with neighborhood muscle flaps.

This protocol led, after 38 years, to lower mortality to 2.5% and an average of 15 days of hospitalization.

Conclusion

The double twist technique is an acceptable complimentary method for a**primary closure** of a sternotomy in obese patients and could be tried secondarily in a dehiscence without infection if the bone is not badly damaged, but if the cause is sepsis, from our point of view, it would be contraindicated. If the author meant to refer to a primary closure, which is what I suppose, this reinforcement to a conventional suture is acceptable.

Dr. Daniel E. Absi



Chief, Department

Plastic Surgery

Favaloro Foundation

Buenos Aires

Argentina