



ACTAS Derma-Sifiliográficas

Full English text available at
www.actasdermo.org



VIDEOS OF SURGICAL PROCEDURES IN DERMATOLOGY

Continuous Suture by Tissue Planes[☆]



Sutura continua por planos

C. Garrido-Colmenero,^{*} G. Blasco-Morente, I. Pérez-López, J. Tercedor-Sánchez

Unidad de Gestión Clínica de Dermatología Médico Quirúrgica y Venereología, Hospital Universitario Virgen de las Nieves, Granada, Spain

Introduction

A number of recent publications have described various surgical techniques to prevent wound dehiscence in the immediate postoperative period and later scar dehiscence.¹ The main objective in dermatologic surgery is to achieve complete excision of a tumor followed by the best possible functional and cosmetic outcome.

At the 2005 Iberian–Latin American Dermatology Conference (CILAD), Serrano Falcón et al.² presented a new surgical technique, the vector-running subcutaneous suture, improving on the technique proposed by Weber and Wulc³ to prevent wound and scar dehiscence.

The technique we currently use in our center to prevent wound and scar dehiscence is the continuous suture by tissue planes. This consists of a continuous subcutaneous suture followed by an intradermal suture; it is an adaptable and simple technique that enables us to control tension forces in the wound until this has healed. Furthermore, the use of an intradermal suture avoids the unsightly marks left by external stitches and makes further attendance for suture removal unnecessary. We use an absorbable suture material with a mid-term absorption time to avoid the formation of foreign body granulomas that can develop when nonabsorbable sutures are used.

Description of the Technique

For the continuous suture we use 3/0 Novosyn, a coated, braided synthetic suture of poly(glycolide-co-l-lactid 90/10) with a mid-term absorption time. The high initial strength of the copolymer and its predictable breakdown profile guarantee secure wound support without interference in the critical process of wound healing.

After surgical excision of the lesion following the tension lines of the relaxed skin, we start the continuous subcutaneous suture at one end of the wound, inserting the needle through the mid dermis and including the full thickness of the hypodermis; we then introduce the needle into the hypodermis of the opposite side and bring it out through the mid dermis and, without tying, we continue the suture to the other end of the wound to complete closure of the deep plane. We then continue with the same suture to perform the continuous intradermal suture. On completion of the intradermal suture, we tie the suture at the end of the wound where closure was initiated, leaving the knot buried in the intermediate plane.

Indications

This surgical technique is indicated for areas of tension. These include areas with greater degrees of movement and, therefore, scars subjected to greater lateral tension (for example, on the trunk, in particular the back).

Complications

We have now used this technique in 25 patients. In 1 case, the suture material parted when the continuous

[☆] Please cite this article as: Garrido-Colmenero C, Blasco-Morente G, Pérez-López I, Tercedor-Sánchez J. Sutura continua por planos. Actas Dermosifiliogr. 2015;106:833–834.

^{*} Corresponding author.

E-mail address: cristinagarrido86@gmail.com (C. Garrido-Colmenero).

subcutaneous suture was being tensed in a 10 cm defect on the shoulder. This can be avoided by progressively tensing the continuous subcutaneous suture as it is being performed.

To date, with a postsurgical follow-up of 9 months, we have observed no wound or scar dehiscence.

Conclusions

The continuous suture is a rapid technique that allows us to perform direct closure in areas of tension, preventing wound dehiscence. In addition, the unsightly marks on the borders of the scar are avoided and it is not necessary for the patient to return to outpatients to have the suture removed.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Appendix A. Supplementary data

Supplementary data associated with this article is available online: [doi:10.1016/j.adengl.2015.10.005](https://doi.org/10.1016/j.adengl.2015.10.005).

References

1. Serrano-Ortega S, Serrano-Falcón C, Fernández-Pugnaire MA. Sutura oblicua subcutánea. *Actas Dermosifiliogr.* 2015;106: 65–7.
2. Serrano Falcón C, Serrano Ortega S, Abad J, Linares J. Sutura oblicua subcutánea. Libro de resúmenes XVI Congreso CILAD. Cartagena de Indias, 2005.
3. Weber PJ, Wulc AE. Vector-running subcuticular sutures in high-tension and high-mobility areas. *Ann Plast Surg.* 1992;29: 471–3.