

Correspondence and Communications

Razor wound debridement: A new tool for wound bed preparation

Dear Sir,

Surgery debridement is probably the most important part of complex wound treatment. It needs to be performed in order to remove all those elements that impede the correct injury healing such as devitalized edges, sloughs, hematoma, necrotic tissues or bacterial colonization.¹

Multiple methods are used in order to perform a satisfactory wound debridement such as manual or electric dermatomes, curette or, more recently, hydrosurgery devices.^{2,3} The aim of this paper is to make known the specific applications of sterile razor blades for this purpose. After an exhaustive research, our team has come to the conclusion that there is only one paper that describes the utility of razor blades; however, it is specifically referred to its use in the elimination of blisters in second-degree burns.⁴

Razor blades have been classically used as a method to shave and remove hair from the incision area. However, nowadays it's no longer used for this purpose, as it has been related to an increase of surgical wound infection. This association has resulted in the disabling of these devices in many medical centres.⁵ Nevertheless, our Plastic Surgery department developed a new usefulness for this tool: we utilize these one-use sterile devices for surgery wound debridement prior to wound coverage.

Our team has noticed several advantages from using this tool. Firstly about the technique; undoubtedly, it allows a uniform, precise, rapid, selective and comfortable debridement. Moreover, surgeons have perceived a great facility to access irregular or angulated sites. As seen in the video (video 1) and in the pre and post-debridement images (Figures 1 and 2), the short handle allows meticulous and precise movements, the blade spacing permits a uniform cut and the small size of the head ensures a clearly easy access. Although debrided tissue can be accumulated in the surgical bed, like most of the other debridement methods, the assistant can easily remove it.

We would like to provide a new role for this tool in surgical debridement of both acute (burns and acute tissue defects) and chronic wounds (vascular ulcers and pressure ulcers). We also would like to highlight the specific use in delicate areas with difficult access, such as: the face hands, costal wall or toes. Another important aspect is



Figure 1 Pre-debridement.



Figure 2 Post- razor surgical debridement.

the significant reduction of costs that this sterile one-use device entails (0.23€ per unit in our hospital).

Presently, our team is conducting a prospective comparative study regarding the effectiveness and efficiency of treating the tissue defects and wounds with razor blades versus other debridement methods.

Competing interest

The authors declare that they have no competing or financial disclosures.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.bjps.2019.02.004](https://doi.org/10.1016/j.bjps.2019.02.004).

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