A New Practical Method for Grafting: The Use of Bactigras Paper

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Dear Editor,

Grafting is one of the most frequently used procedures in plastic surgery. It is of critically important to secure the graft in the most desirable way on the recipient area following graft harvesting. In case of hematoma and seroma formation, perforation meshing the graft to prevent accumulation under the graft surface constitutes one of the basic measures in ensuring graft fixation. A method proposed by many authors in traditional medical literature related to this procedure involves spreading the graft on a flat wooden or plastic apparatus, grafting using a saline solution, and then meshing the graft in several spots using a scalpel. However, this procedure presents challenges because of the thin and fragile structure of the graft tissue.

This study aims to demonstrate an application of data indicating that the graft can be more easily meshed with a scalpel when spread on a Bactigras™ (Bactigras®, chlorhexidine acetate 0.05%, paraffin, Smith&Nephew, UK) sheet, thereby utilizing the lubricating effect of its paraffin content, and supported underneath with a cotton pad or surgical compress (Figure 1).

To this end, after informed consent was obtained from patients, the procedure was performed with success in 256 patients between 2011 and 2014. After the graft was harvested from the donor site, a 5×5, 10×10, or 15×15 cm paraffin sheet obtained from the Bactigras™ to be used on the graft was preserved, and the graft was placed on it with the aid of physiological saline and the use of a scalpel. Several perforations of desired dimensions were then created on the graft using the scalpel (Figure 2a, b). Following this process, the graft was spread on the recipient site and was anchored in place by a stapler or absorbable sutures. The graft dressing was then covered with the respective use of the Bactigras™ pad, wet cotton and sponge.

The current medical literature contains several proposals to facilitate the grafting process. The use of Bactigras™ makes it possible to reduce the number of instruments employed at the surgical site during grafting. It has been observed that creating relatively smaller perforations with a scalpel on grafts resting on a wooden or plastic apparatus is more difficult than applications performed using a Bactigras™ paraffin sheet. Moreover, the graft may undergo contraction to a certain extent after being harvested from the donor site, thus constituting another difficulty in performing the procedure. However, the lubricating effect of paraffin on the Bactigras™ sheet coupled with the light weight of the sheet itself allows the surgeon to prepare the graft in a more effective, rapid, and effortless way. Surgical material such as cotton pads or surgical compresses may be placed under the sheet to facilitate the process. It has also been observed that the graft spreads more easily across the sheet owing to the lubricating effect of paraffin. In addition, many other steps involved in transplanting the graft to the recipient site, such as handling, cutting, shaping, and insetting, were found to be more easily performed.

In summary, the grafting procedure, which is commonly used in plastic surgery, can be performed more rapidly, effectively, and effortlessly using a paraffin sheet, which removes the need to use additional material. We therefore suggest that the use of Bactigras™ sheets in similar procedures will prove to be equally beneficial.
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Figure 2. a, b. A mesh of desired dimensions can be created with the help of a scalpel