Journal of Tissue Viability (2015) **24**, 180—184

ELSEVIER

JOURNALOF tissueviability

www.elsevier.com/locate/jtv

Case report

Clinical use of semiliquid dermal substitute: A case report

Luigi Troisi [a,*], **Giovanni Papa** [a,1], **Vittorio Ramella** [a,1], **Zoran Marij Arnež** [b,1]

[a] *Ospedale di Cattinara, Strada di Fiume 447, 34149 Trieste, Italy*
[b] *Università degli Studi di Trieste, Dipartimento delle Scienze Mediche, Chirurgiche e della Salute, Strada di Fiume 447, 34149 Trieste, Italy*

KEYWORDS
Integra;
Dermal substitute;
Flowable;
Tunnelled wound

Abstract Nowadays Integra™ is an integral part of the "reconstructive ladder", recently the new Integra™ Flowable Dermal Regeneration has appeared on the market. This is a semiliquid compound, malleable and those characteristics widen the indication for its use.

In this report we describe two cases in which we used this product to repair undermined and tunnelled wounds.

We believe that this product can be useful for treatment of tunnelled wounds of small dimensions reducing the need for major procedures.
© 2015 Tissue Viability Society. Published by Elsevier Ltd. All rights reserved.

1. Introduction

Integra™ (Integra Life-Sciences, Plainsboro, NJ) is a dermal substitute. It has been introduced by Burke and Yannas [1—3] in the early 80s. The aim of their research was to find a substitute for the skin of patients with massive burns [4]. They built the "artificial skin" composed of two layers [1—3]: a shark condroitin-6-phosphate and a bovine collagen layer to reconstruct the dermis and a silicone layer to serve as epidermis.

Nowadays Integra™ is an integral part of the "reconstructive ladder" [10] and is utilised for treatment of skin loss in burns, trauma, oncologic and pressure sore surgery [9—14].

Recently the new Integra™ Flowable Dermal Regeneration has appeared on the market. This is a semiliquid compound made of Type I pure bovine collagen (90%) and glycosaminoglycan —

* Corresponding author. Tel.: +390403994258; fax: +393994388.
E-mail addresses: luigitroisi@gmail.com (L. Troisi), giovanni.papa@aots.sanita.fvg.it (G. Papa), vittorio.ramella@gmail.com (V. Ramella), zoran.arnez@aots.sanita.fvg.it (Z.M. Arnež).
[1] Tel.: +390403994258; fax: +393994388.

http://dx.doi.org/10.1016/j.jtv.2015.07.001
0965-206X/© 2015 Tissue Viability Society. Published by Elsevier Ltd. All rights reserved.

chondroitin-6-sulphate — (10%). The compound is malleable and that characteristic widens the indication for its use, making it usable even in tunnelled wounds.

1.1. Case 1

Female 49-year-old, presented with a wound on the forehead. The wound was undermined, with a loss of periosteum and was due to harvesting of a forehead flap for nasal reconstruction following excision of a Basal Cell Carcinoma (Fig. 1a). The patient had no comorbidities and the flap survived completely.

First a radical wound debridement was performed (Fig. 1b) which was followed by reconstruction using 3 ml of Integra™ Flowable Dermal Regeneration (Fig. 1 c—d) put directly on the exposed bone and then covered by Integra™ Double Layer skin substitute. After three weeks the dermal substitute was perfectly taken (Fig. 2a) and we provided cover by a full thickness skin graft taken from the pedicle of the frontal flap during the flap autonomization procedure (Fig. 2b). At the follow up after one month the graft was completely taken and there was a good profile with no depression of the treated zone (Fig. 2c) as well at the follow-up after one year (Fig. 2d).

1.2. Case 2

Male 22-year-old, came to our observation because of a cavitary wound on the medial ankle due to a closed trauma occurred one month before. He had not comorbidity. The wound was tunnelled (wide 2 cm, deep 1.5 cm), did not touch the bone and showed no sign of infection (Fig. 3a). Despite a previous debridement and the use of dressings the wound was not healing. We decided to perform a radical debridement (Fig. 3b) and repaired the tunnelled wound with 3 ml of Integra™ Flowable Dermal Regeneration (Fig. 3c—d) covered by a non adhesive dressing. After five days the dermal substitute was completely taken (Fig. 4a) and at day seven reepithelization started (Fig. 4b). At one month follow-up (Fig. 4c—d) the wound was completely healed with a good aesthetic outcome. The patient had no pain and started again his daily and sports activities.

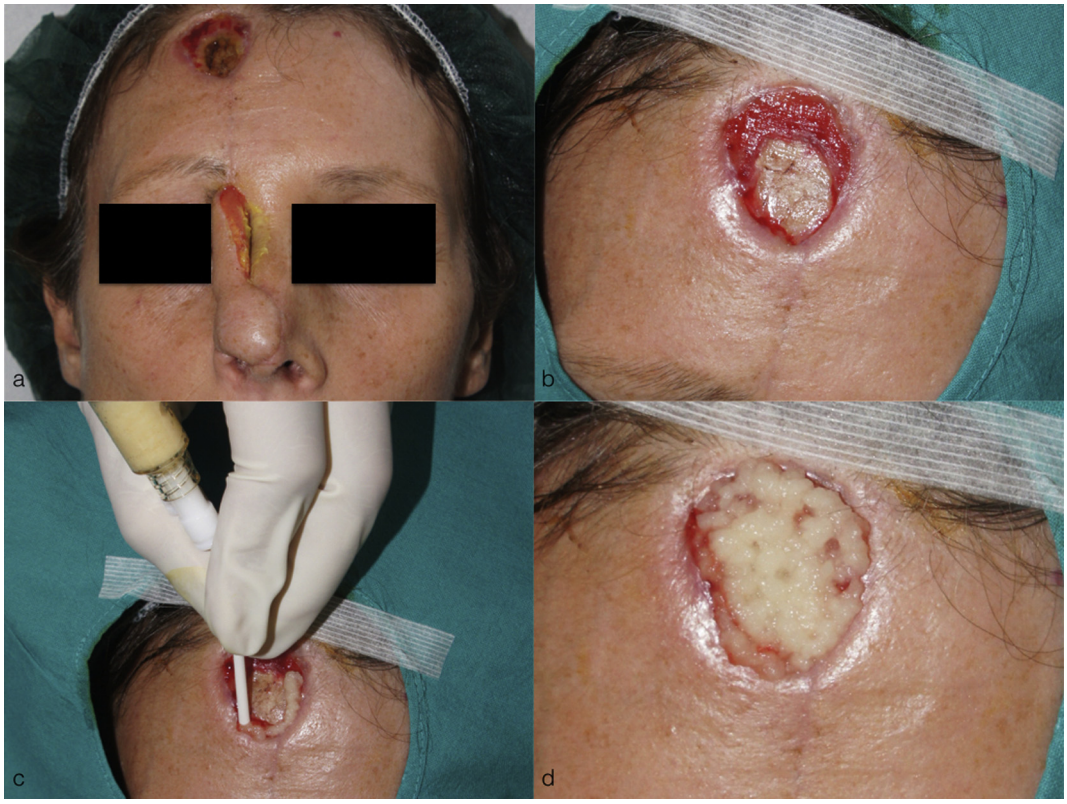

Fig. 1 Case 1; a) before the debridement; b) after the debridement; c) insetting of Integra™ Flowable Dermal Regeneration; d) immediate post-operative result.

Download English Version:

https://daneshyari.com/en/article/2671306

Download Persian Version:

https://daneshyari.com/article/2671306

Daneshyari.com