Review Article

Split-thickness skin graft donor-site dressings: is it possible to establish the ideal dressing based on a literature review?

Curativos tópicos para áreas doadoras de enxertos de pele parcial: é possível estabelecer o mais adequado com base em uma revisão da literatura?

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■ **ABSTRACT**

This study aimed to assess the possibility of establishing the most suitable split-thickness skin graft donor site dressings on the basis of scientific evidence gathered through a literature review. The most relevant studies originally published in any language in the last 7 years and indexed in the US National Library of Medicine (PubMed), Cochrane Central Register of Controlled Trials (CENTRAL), and Latin American and Caribbean Literature Health Sciences (LILACS) databases were evaluated. A literature survey was performed using keywords related to the theme and inclusion and exclusion criteria. The final sample comprised 25 publications, one domestic and 24 international. The results showed a gap in the literature with respect to studies that evaluated different split-thickness skin graft donor site dressings. The literature review revealed the impossibility of establishing the most effective split-thickness skin graft donor site dressing due to the lack of scientific evidence, thus preventing the formulation of a definite conclusion on this topic.

Keywords: Plastic surgery; Skin transplantation; Autologous transplantation; Wound Injury; Wound healing.

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■ **RESUMO**

O objetivo deste estudo foi verificar, por meio de uma revisão da literatura, a possibilidade de se estabelecer, com base em evidências científicas, o curativo tópico mais adequado para a aplicação em áreas doadoras em enxertos de pele parcial. Foram analisados os mais relevantes estudos publicados originalmente nos últimos sete anos, em qualquer idioma, porém, que estivessem indexados às bases de dados US *National Library of Medicine* (PubMed), *Cochrane Central Register of Controlled Trials* (CENTRAL) e Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS). As buscas foram realizadas por meio do uso de descritores associados ao tema e de critérios de inclusão e exclusão. A amostra final deste estudo foi composta por 25 publicações, sendo uma nacional e 24 internacionais. Com base nos achados, constatou-se que há uma lacuna na literatura acerca de estudos que visam analisar os diferentes tipos de curativos usados em áreas doadoras em enxertos de pele parcial. Por meio da revisão da literatura realizada, pode-se concluir que não é possível se estabelecer o curativo mais adequado para uso em áreas doadoras de enxertos de pele parcial, devido à falta de evidências científicas que possibilitem um achado conclusivo acerca do tema.

Descritores: Procedimentos cirúrgicos reconstrutivos; Transplante de pele; Transplante autólogo; Ferimentos e lesões; Cicatrização.

INTRODUCTION

Partial-thickness skin grafts are created using a reconstructive technique that offers many benefits, including accelerating the healing of burns, trauma, ulcers, and other wounds and reducing the occurrence of extensive scars[1-8]. In this context, well-established techniques are available for managing the skin graft locations to ensure a proper result and promote wound healing. However, a similar consensus does not exist with regard to the most appropriate care or donor site dressing to be applied that involves better healing and aesthetic acceptance[9,10].

The partial-thickness skin collection process involves excision of the epidermis and part of the dermis, which leaves a wound in the donor area. Although such wounds are created under controlled and sterile conditions, they can be a considerable challenge for patients during and after the healing process because they cause itching, pain, infection, and aesthetic discomfort[9].

These areas of partial-thickness skin graft donors generally receive healing dressings to assist with maintaining three main functions, namely patient comfort, scarring, and protection[8]. Succinctly, the ideal bandage must promote healing and be comfortable for the patient, impervious to infectious organisms, easy to handle, and low-cost[10].

Dressings date back to prehistorical times, when they were prepared using poultices of leaves and herbs to stop bleeding and facilitate healing. Over time, various types of treatments have been implemented. In the nineteenth century, after knowledge was gained about the relationship between bacteria and infections, the aseptic concept in healing techniques was introduced.

Until World War II, emphasis was placed on the use of antiseptics and dressing agents with a dry cover when the question was raised about the toxicity of antiseptics and the introduction of antibiotics into dressings. Thereafter, bandages became sterile, followed aseptic techniques, and used hydrocolloid- and hydropolymer-based covers and transparent and porous films made of a wide range of materials[11].

In short, the dressing must have some properties such as the following: 1) made of natural or artificial biocompatible and cytocompatible materials; 2) reduces risks of disease transmission and inflammatory and immune responses; 3) supports and stimulates cell migration owing to its optimized architecture; 4) retains moisture from the wound; 5) stabilizes the wound bed; and 6) supports quick healing with good aesthetic results[5,6,8-10,12].

However, given the many dressings now available in the market and the low number of efficacy studies, which bandage shows the best performance before its

application to donor areas of partial-thickness skin grafts is not yet known.

The aim of this study was to verify the possibility of identifying the topical bandage that is better suited for use in the donor areas of partial-thickness skin grafts, using scientific evidence extracted from a literature review.

METHODS

Research Strategy

To comply with the proposed objective, we analyzed the most relevant studies originally published in any language before or during July 2017 as long as they were indexed in the US National Library of Medicine (PubMed), Cochrane Central Register of Controlled Trials (CENTRAL), and Latin American and Caribbean Health Sciences Literature (LILACS) databases.

To select studies with sufficient scientific evidence, we sought publications relating to meta-analyses and randomized controlled trials (RCTs) in humans. The publication period of 2011 to July 2017 was established as an inclusion criterion to ensure the inclusion of recent and current studies.

In the search procedure, we used the following combinations of keywords: "enxerto de pele parcial," "enxerto de pele," "área doadora," "região doadora," "curativo," and "cicatrização." The following terms of equivalence in English were used during the search in the international databases: "skin graft," "partial-thickness," "split-thickness," "donor site," "dressing," "management," and "treatment."

The inclusion and exclusion criteria were applied as shown in Chart 1.

Chart 1. Inclusion and exclusion criteria and main results.

Inclusion criteria	
Design	• Randomized controlled trials in humans • Meta-analyses • Comparative studies
Patients	• Unrestricted
Intervention	• Partial-thickness skin grafting • Use of topical dressing in donor area
Language	• Not defined
Exclusion criteria	
Design	• Poorly explained and/or incomprehensible methodology • Case reports or case series
Form of publication	•Publication as abstract only
Main results	
	• Healing of donor area of partial-thickness skin grafting

RESULTS

No meta-analyses on the subject were found in the literature search. The final sample was composed of 25 RCT publications (Chart 2), one Brazilian study in the LILACS database and 24 international publications in the PubMed database. No studies were found in the CENTRAL database.

Chart 3 presents the main data related to the studies included in this analysis.

DISCUSSION

Considering the care needed in the donor areas of partial-thickness skin grafts, learning more about the dressings that can be applied in such wounds is necessary to provide correct maintenance that might lead to successful skin grafting and higher patient quality of life.

Therefore, we examined the possibility of choosing the most appropriate topical bandage for application in partial-thickness skin graft donor areas by conducting a literature review of studies that compared different approaches[4,7,29-31] but did not include case reports or case series because they are unable to describe the clinical success (or lack thereof) of a specific dressing.

A considerable variety of issues analyzed in different studies was found. Pain referred by the patient, which is the most often analyzed factor, was featured in all but two studies[6,16], of which one[16] examined patient comfort instead. The second most often analyzed factor was re-epithelization/scarring, which appeared in all but three studies[8,20,24]; however, no other item correlated with it. Therefore, the differentiation of other items randomly analyzed by different studies hindered our ability to aggregate our findings and form an evidence-based conclusion.

A question of the studies that seem to be somehow standardized between them consisted of the donor region, for which the thigh was one of the locations used in all studies that specified where the partial-thickness skin samples were removed. However, this statement cannot be considered conclusive considering

Chart 2. Publications that comprised the study sample.

AUTHOR	YEAR	TITLE	LANGUAGE	JOURNAL
Bailey et al.[1]	2011	A randomized comparison study of Aquacel Ag and Glucan II as donor site dressings with regard to healing time, cosmesis, infection rate, and patient's perceived pain: a pilot study	English	Journal of Burn Care and Research
Dornseifer et al.[3]	2011	The ideal split-thickness skin graft donor-site dressing: a clinical comparative trial of a modified polyurethane dressing and Aquacel	English	Plastic and Reconstructive Surgery
Kaartinen & Kuokkanen[13]	2011	Suprathel® causes less bleeding and scarring than Mepilex® Transfer in the treatment of donor sites of split-thickness skin grafts	English	Journal of Plastic Surgery and Hand Surgery
Khorasani et al.[6]	2011	The effects of aloe vera cream blinded, split-thickness skin graft donor site management: a randomized, placebo-controlled study	English	Wounds
Muangman et al.[14]	2011	Comparative clinical study of Bactigras and Telfa AMD for skin graft donor-site dressing	English	International Journal of Molecular Science
Higgins et al.[15]	2012	Split-thickness skin graft donor site management: a randomized controlled trial comparing polyurethane with calcium alginate dressings	English	International Wound Journal
Solanki et al.[16]	2012	A randomised prospective study of split skin graft donor site dressings: AWBAT-D™ vs. Duoderm®	English	Burns
Assadian et al.[12]	2013	A prospective, randomised study of a novel transforming methacrylate dressing compared with a silver-containing sodium carboxymethylcellulose dressing on partial-thickness skin graft donor sites in burn patients	English	International Wound Journal
Brölmann et al.[9]	2013	Randomized clinical trial of donor-site wound dressings after split-skin grafting	English	British Journal of Surgery
Davidson et al.[17]	2013	Do functional keratin dressings accelerate epithelialization in human partial thickness wounds? A randomized controlled trial on skin graft donor sites	English	ePlasty
Ding et al.[18]	2013	A randomized comparison study of Aquacel Ag and Alginate Silver as skin graft donor site dressings	English	Burns
Hassanpour et al.[19]	2013	Comparison of three different methods of dressing for partial thickness skin graft donor site	English	World Journal of Plastic Surgery
Healy et al.[20]	2013	Prospective randomized controlled trial: fibrin sealant reduces split skin graft donor-site pain	English	Plastic and Reconstructive Surgery
Kaiser et al.[21]	2013	Alginate dressing and polyurethane film versus paraffin gauze in the treatment of split-thickness skin graft donor sites: a randomized controlled pilot study	English	Advances in Skin & Wound Care
Läuchli et al.[22]	2013	Management of split-thickness skin graft donor sites: a randomized controlled trial of calcium alginate versus polyurethane film dressing	English	Dermatology
Malin et al.[23]	2013	Silver-coated nylon dressing plus active dc microcurrent for healing of autogenous skin donor sites	English	Burn Surgery and Research
Raza et al.[24]	2014	Comparison of bupivacaine moistened dressing and conventional dressing for pain relief on skin graft donor sites	English	Journal of the College of Physicians and Surgeons Pakistan
Tanaka et al.[25]	2014	Lipid-colloid dressing shows improved reepithelialization, pain relief, and corneal barrier function in split-thickness skin-graft donor wound healing	English	The International Journal of Lower Extremity Wounds

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Chart 2. Publications that comprised the study sample.

Dhanraj[2]	2015	A clinical study comparing helicoll with scarlet red and opsite in the treatment of split thickness skin graft donor sites - a randomized controlled trial	English	Indian Journal of Surgery
Hasatsri et al.[26]	2015	Randomized clinical trial of the innovative bilayered wound dressing made of silk and gelatin: safety and efficacy tests using a split-thickness skin graft model	English	Evidence-Based Complementary and Alternative Medicine
Jorge et al.[5]	2015	Malha de algodão parafinado versus malha de fibra de celulose salinizada como curativo temporário de áreas doadoras de pele parcial	Portuguese	Revista Brasileira de Queimaduras
Salehi et al.[27]	2015	Evaluation of amniotic membrane effectiveness in skin graft donor site dressing in burn patients	English	Indian Journal of Surgery
Subrahmanyam[10]	2015	Honey dressing accelerates split-thickness skin graft donor site healing	English	Indian Journal of Surgery
Akita et al.[28]	2016	Silver sulfadiazine-impregnated hydrocolloid dressing is beneficial in split-thickness skin-graft donor wound healing in a small randomized controlled study	English	The International Journal of Lower Extremity Wounds
Schulz et al.[8]	2016	A prospective clinical trial comparing Biobrane®, Dressilk® and PolyMem® dressings on partial-thickness skin graft donor sites	English	Burns

the number of studies that did not specify this aspect in their methodologies[1,3,16,21,24].

It should be noted that in addition to the diversification between the points examined by the studies, follow-up time also showed a considerable variation, ranging from 1 day[24] to 180 days[1,8,18,21,28].

Nevertheless, one of the questions that most severely hampers the establishment of an ideal dressing for donor areas of partial-thickness skin grafts consists of the different approaches to applying dressings to the patients in different studies. Half of the studies[2,4,5,9,10,14,15,18,20,23,24,28] (n = 12) used samples in which the patient received only one type of bandage.

This kind of approach is prone to creating biases that make data aggregation impossible because patients will respond according to the dressing applied. Therefore, one could raise the question that the results of these searches are not specifically related to the effects of the tested dressings themselves but rather to the influence generated by the specific organism to which it was applied. In other words, comparing the effects of a kind of bandage used in "John" with another type of bandage used in "Mary" is irrelevant because not only will the differentiation of dressings influence the results but also the distinction between organisms "John" and "Mary" will differ.

However, we must report that some studies used approaches that can be regarded as having greater credibility and less bias. The first is the approach used by some studies[1,12,27,30] that used samples in which the number of donor areas used in the same patient is compatible with the number of dressings tested, causing the same patient to receive different dressings in different donor areas.

The second approach, which was adopted in eight studies[3,6,8,13,17,19,25,26], used samples in which the same donor area in the same patient was divided between the number of dressings. Thus, these searches eliminated the bias caused by the differentiation of organisms in which the bandages were tested.

However, taking into account the objective of this research, the greatest difficulty related to the choice of an ideal dressing to be applied in the donor areas of partial-thickness skin grafts is associated with the diversity of the dressings available in the market, which are distinguished by not only the composition and active ingredients but also the trademarks and manufacturers.

In relation to the relevant literature, this situation is not different, as the publications reviewed in this research evaluated various dressings, both those that are commercially available and those that are not yet available but are being presented to academic, scientific, and professional communities, such as those by Khorasani et al.[6], Assadian et al.[12], Malin et al.[23], Raza et al.[24], Hasatsri et al.[26], Salehi et al.[27], and Subrahmanyam[10].

There was also considerable technical-related diversity. Although most consisted of knitwear, fibers, and films[1-3,5,8,9,12-18,20-22,25,26,28], some prefabricated dressings maintain humidity with individual substances through catheters[24], feature gauze impregnated with different compounds[6,10,19,27], or even consist of electronic devices[23].

Chart 3. Main data of the analyzed publications.

Study	Evaluated bandage	Items evaluated	Sample (n)	Donor area	Monitoring period	Results
Bailey et al.[1]	Sodium carboxymethyl cellulose impregnated with 1.2% silver (Aquacel Ag®) and composed of beta-glucan (Glucan II®)	Pain, healing time, infection rate, and aesthetic result	20	–	180 days	Healing time, infection rates, or cosmetic results showed no significant difference; the Aquacel Ag® presented better reduction of the referred pain
Dornseifer et al.[3]	Sodium carboxymethyl cellulose impregnated with 1.2% silver (Aquacel Ag®) and modified polyurethane (microperforated)	Re-epithelialization, pain, cost, and aesthetic result	50	–	60 days	Modified polyurethane showed better results than Aquacel Ag® at the time of re-epithelialization and producing less referred pain; no statistical difference in aesthetics
Kaartinen & Kuokkanen[13]	Copolymer of polylactide, trimethylene carbonate and ε-caprolactone (Suprathel®) and polyurethane foam (Mepilex® Transfer)	Healing, pain, and aesthetic result	22	Thighs	90 days	Suprathel® produced less pain and bleeding, and better aesthetic results
Khorasani et al.[6]	Gauze with cream base + Aloe vera, gauze with cream base, or gauze only	Healing and infection	45	Thighs	–	Gauze only presented the longest time to heal; however, healing with gauze with cream base was faster than that with gauze with base cream + Aloe vera
Muangman et al.[14]	Paraffin-impregnated gauze with chlorhexidine (Bactigras®) and gauze impregnated with polyhexamethylene biguanide (Telfa AMD®)	Re-epithelialization, pain, infection, and cost-benefit	32	Thighs	–	Telfa AMD® showed lower healing time, less pain, and lower occurrence of infection; no considerable difference in cost-effectiveness was observed among the bandages tested
Higgins et al.[15]	Polyurethane (Allevyn®) and calcium alginate (Kaltostat®)	Pain, infection, healing, ease of use, and overall patient satisfaction	36	Thighs, calves, arms and torso	–	No significant differences were found between the two dressings in healing time, pain, healing, or patient satisfaction. Allevyn® required more care and changes
Solanki et al.[16]	Nylon mesh with silicone membrane and collagen peptides (AWBAT-D®) and hydrocolloid (DuoDERM®)	Healing and patient comfort	14	–	–	Without differences in referred pain, Duoderm® provided re-epithelization in less time. No infections or abnormal scars were found with either product

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Chart 3. Main data of the analyzed publications.

Assadian et al.[12]	Sodium carboxymethyl cellulose impregnated with 1.2% silver and methacrylate transformer	Referred pain, healing time, and comfort reported	19	Thighs and calves	24 days	No statistically significant difference was observed in healing time; however, the methacrylate dressing presented less pain and additional comfort
Brölmann et al.[9]	Calcium alginate fiber (Kaltostat®), semi-permeable film (Tegaderm®), paraffin-impregnated gauze (Jelonet Adaptic® or®), hydrocolloid (DuoDERM E®), hydrofiber (Aquacel®), and silicone fiber (Mepitel®)	Time for re-epithelialization, pain, itching, adverse effects, and scarring	288	Thighs, back, arms	90 days	DuoDERM E® provided complete re-epithelialization faster (7 days) than any other, while the pain was lower with Tegaderm®. The infection was twice as big when Adaptic® or Jelonet® was used, and Tegaderm® appeared less likely to cause scarring
Davidson et al.[17]	Calcium alginate fiber (Algisite®) and keratin-rich absorbable fiber (Keramatrix®)	Time for re-epithelialization, ease, and pain during handling	26	Thighs	7 days	Young patients showed an 80% rate of re-epithelialization in 7 days as compared with 5% in older patients; the effect of Keramatrix® was statistically faster in young patients, with no significant difference in older patients
Ding et al.[18]	Sodium carboxymethyl cellulose impregnated with 1.2% silver (Aquacel Ag®) and calcium alginate film and silver (Silver Alginate®)	Time for re-epithelialization, pain, infection rate, and aesthetic result	20	Back, thighs, and chest	180 days	Patients treated with Aquacel Ag® showed higher pain levels and longer re-epithelialization rates; no significant differences were found in infection rates or aesthetic results
Hassanpour et al.[19]	Paraffin-impregnated gauze, nitrofurazone- and paraffin-impregnated gauze, and dry gauze	Rates of healing, pain, discharge, infection, and cost	60	Thighs	21 days	Nitrofurazone- and paraffin-impregnated gauze provided re-epithelization significantly faster with less pain and secretions. No significant differences were found in cost among the three treatments
Healy et al.[20]	Self-adhesive mesh (Mefix®) and self-adhesive fabric (Mefix®) + fibrin sealant spray	Pain and disability	40	Thighs	14 days	Patients treated with self-adhesive mesh (Mefix®) + fibrin sealant spray showed significantly lower rates of pain and disability

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Chart 3. Main data of the analyzed publications.

Kaiser et al.[21]	Paraffin-impregnated gauze (Bactigras®) covered with gauze and alginate film (Algisite M®) covered with transparent polyurethane mesh (OpSite Flexigrid®)	Referred pain, dressing changes, healing time, aesthetic results, cost, and patient satisfaction	30	–	180 days	No statistically significant differences were found, but the paraffin-impregnated gauze group showed a lower cost
Läuchli et al.[22]	Calcium alginate fiber (Kaltostat®) and transparent film of polyurethane (OpSite Flexigrid®)	Referred pain, re-epithelialization time, dressing changes, and complications	38	Thighs	41 days	OpSite Flexigrid® caused significantly less pain but demanded more frequent dressing changes and involved leakage problems
Malin et al.[23]	Nylon mesh and silver with microcircuit device active and inactive (placebo)	Referred pain, re-epithelization, and signs of infection	25	Thighs	15 days	No statistically significant differences
Raza et al.[24]	0.25% bupivacaine hydrochloride and saline solution	Pain	150	–	1 day	Need for analgesia in 6.7% of patients treated with 0.25% bupivacaine hydrochloride and in 96% of patients treated with saline solution
Tanaka et al.[25]	Non-adherent polyester (Trex-C®) and non-adherent petrolatum- and hydrocolloid (Hurgotul®)-impregnated polyester	Pain and re-epithelialization	10	Thighs	30 days	The petrolatum- and hydrocolloid-impregnated polyester dressing presented better healing and pain relief than the non-adherent conventional polyester
Dhanraj[2]	Film of collagen type-1 (Hellicol®), transparent film of polyurethane (OpSite®), and petrolatum film impregnated with Scarlet Red®	Pain, healing time, initial dressing uptake, and infection rate	30	Thighs	90 days	Helicoll® provided significantly less pain, lower infection rate, and less need for dressing changes in addition to a shorter healing time than Scarlet Red® and was comparable with OpSite®
Hasatsri et al.[26]	Dressing of two layers of silk and gelatin, and paraffin-impregnated gauze (Bactigras®)	Healing time, pain, barrier function, and systemic reaction	23	Thighs	150 days	The dressing with two layers of silk and gelatin showed significantly better results than Bactigras® in terms of healing time and recovery of the barrier function of the skin and pain reduction

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Chart 3. Main data of the analyzed publications.

Jorge et al.[5]	Salinized cellulose fiber fabric (Rayon®) and paraffin-impregnated gauze (Jelonet®)	Presence of serous, bleeding, signs of infection, flushing location, offset of the bandage, complete re-epithelialization, and referred pain	37	Thighs and scalp	15 days	Jelonet® promoted less pain and faster re-epithelialization
Salehi et al.[27]	Amniotic membrane and petroleum jelly--impregnated gauze	Healing, pain, and infection rate	42	Thighs and other	-	The amniotic membrane provided a significantly faster healing and less reported pain, but no significant differences in infection rates
Subrahmanyam[10]	Honey-impregnated gauze and petroleum jelly-impregnated gauze	Pain, leakage of exudate, cutaneous reactions, re-epithelization, and aesthetic results	100	Thighs	30 days	Re-epithelization occurred significantly faster in patients treated with the honey-impregnated gauze, with no significant differences in relation to referred pain or allergic reactions between the groups
Akita et al.[28]	Hydrocolloid (DuoDERM CGF®) and silver sulfadiazine-impregnated hydrocolloid (Biohesive Ag®)	Re-epithelialization, pain, ease of handling, bleeding, and grip	14	Thighs	180 days	Silver sulfadiazine-impregnated hydrocolloid provided significantly higher healing, reduced the degree of bleeding, and demonstrated better barrier function and aesthetic results
Schulz et al.[8]	Nylon fabric coated with collagen type I (Biobrane®), silk mesh with fibrin (Dressilk®) and a hydrophilic polyurethane membrane (PolyMem®)	Pain, curative transparency, active bleeding, exudation, and inflammation	28	Thighs	180 days	No significant differences were found among the three dressings in terms of pain, re-epithelization, or bleeding. PolyMem® presented the below results regarding the reduction of inflammation and exudation in relation to patient comfort

n: Number of patients included in the polls; - : Data not specified in the study.

In general, in all the studies analyzed, 50 types of different dressings were examined, ranging from active products and trademarks, and the repetition of these bandages between the different studies was minimal, including Aquacel Ag® in four studies[1,3,12,18]; paraffin-impregnated gauze in four studies[5,9,19,26] but under different trademarks (Adaptic®, Jelonet®, and Bactigras®); calcium alginate fiber in four studies[9,15,17,22] under two distinct trademarks (Algisite® and Kaltostat®); and DuoDERM® hydrocolloid in three studies[9,16,28]. Therefore, this diversity of active ingredients and brands used in studies collaborates considerably to impede comparative credibility and confidence.

Finally, we found a gap in the literature of studies aimed at analyzing the different types of dressings used in donor areas in partial-thickness skin grafts. However, the establishment of future studies might be insufficient. Attention should be paid to the standardization methodologies and credibility, which can be used in different surveys with different patients to meet this demand.

Conducting new research around the topic is justified, primarily because of no literary consensus has been reached about the best dressing, which leaves surgeons at the mercy of their own experience or those of more experienced surgeons. Therefore, new research can assist in the decision-making process for surgeons to ensure that it is scientifically grounded.

CONCLUSION

On the basis of the literature review described here, we conclude that it is not possible to identify the most suitable dressing for use in donor areas of partial-thickness skin grafts in terms of comfort, scarring, aesthetic, and protective aspects because although studies demonstrated good results for different dressings, consensus is lacking about whether one is superior to the others.

COLLABORATIONS

RVER Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

OJDM Final approval of the manuscript; writing the manuscript or critical review of its contents.

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