Dokumenttyp: journal article

Autor(en) des Beitrags: Schmauss, Daniel; Rezaeian, Farid; Finck, Tom; Machens, Hans-Guenther; Wettstein, Reto; Harder, Yves

Titel des Beitrags: Treatment of secondary burn wound progression in contact burns—a systematic review of experimental approaches.

Abstract: After a burn injury, superficial partial-thickness burn wounds may progress to deep partial-thickness or full-thickness burn wounds, if kept untreated. This phenomenon is called secondary burn wound progression or conversion. Burn wound depth is an important determinant of patient morbidity and mortality. Therefore, reduction or even the prevention of secondary burn wound progression is one goal of the acute care of burned patients. The objective of this study was to review preclinical approaches evaluating therapies to reduce burn wound progression. A systematic review of experimental approaches in animals that aim at reducing or preventing secondary burn wound progression was performed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) guidelines. The selected references consist of all the peer-reviewed studies performed in vivo in animals and review articles published in English, German, Italian, Spanish, or French language relevant to the topic of secondary burn wound progression. We searched MEDLINE, Cochrane Library, and Google Scholar including all the articles published from the beginning of notations to the present. The search was conducted between May 3, 2012 and December 26, 2013. We included 29 experimental studies in this review, investigating agents that...
maintain or increase local perfusion conditions, as well as agents that exhibit an anti-coagulatory, an anti-inflammatory, or an anti-apoptotic property. Warm water, simvastatin, EPO, or cerium nitrate may represent particularly promising approaches for the translation into clinical use in the near future. This review demonstrates promising experimental approaches that might reduce secondary burn wound progression. Nevertheless, a translation into clinical application needs to confirm the results compiled in experimental animal studies.

Zeitschriftentitel / Abkürzung:
J Burn Care Res

Jahr:
2015

Band:
36

Heft / Issue:
3

Seiten:
e176-89

Sprache:
eng

Pubmed:

Print-ISSN:
1559-047X

TUM Einrichtung:
Klinik und Poliklinik für Plastische Chirurgie und Handchirurgie

Occurrences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Klinik und Poliklinik für Plastische Chirurgie und Handchirurgie (keine SAP-Zuordnung!) > Lehrstuhl für Plastische Chirurgie und Handchirurgie (Prof. Machens) > 2015

entries: