8. MANAGEMENT OF BURN PATIENTS: CHOOSING THE OPTIMAL METHOD OF TREATMENT

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Introduction. Burns are underestimated, life-threatening injuries that are difficult to manage, because of systemic inflammatory response, fluid loss, large scale infections. An ideal burn wound dressing should have good antiseptic properties, reduce epithelization period, absorb exudate provide moisturization and pain relief. Injuries caused by frequent dressing, also, represents an important issue. One of the main problems is improvement of surgical treatment methods, directed towards a debridement and adequate plastic cover. Enzymatic debridement, autodermoplasty, allografts, xenografts, flaps, semisynthetic skin substitutes, cell therapy, tissue expansion – choosing an optimal treatment method, will lead to both shortening the hospitalization period and avoiding sequelae.

Aim of study. To underline the particularities of burns management by studying the scientific articles, for the elaboration of the recommendations for choosing the best treatment option.

Methods and materials. It was done a literature review, by searching the scientific articles on *Google Scholar, PubMed, Elsevier, Cochrane,* published last 5 years, using keywords *"burns surgical management", "burns dressing", "burns grafting".*

Results. Among the substances widespread in burn dressing, povidone-iodine is an antiseptic with wide-action spectrum, reduces epithelization period, when compared to chlorhexidine. Chlorhexidine in a concentration greater than 2% is more effective than silver sulfadiazine. Sulfadiazine is quite widespread, notwithstanding that it is associated with poor healing results, the need for frequent dressings and the pain associated with this. Regarding surgical treatment, early wound debridement decreases the rate of infections and length of hospitalization. Defects reconstruction and coverage should be performed as soon as possible after debridement to decrease fluid loss and infection. It can be done temporary covering with allograft or synthetic skin substitutes, or permanent, with autologous split skin grafts, this depends on burned area of the skin and availability of the donor sites.

Conclusion. Burns injuries are common, the majority requiring only dressings. A proper wound dressing will protect against infection, reduce epithelization period, absorb exudate, provide moisturization and pain relief. In massive burns – dressing is not sufficient, and wound closure requires excisions of burnt skin and donor grafting, to generate skin synthesis and angiogenesis. Although, in our practice, autografts are not always available because of the lack of skin donors and the severity of the injuries. In such cases, it is used allografts, xenografts, semisynthetic skin substitutes, cell therapy, tissue expansion, flaps. The disponible plasty methods can be crucial in optimizing outcomes.