SURGICAL TREATMENT OF SEQUELAES IN POSTBURN PEDIATRIC PATIENTS (165)

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Background: Burns in children are a dramatic accident that will lead to permanent disfigurement and long-term disability. Because of their thin skin, heat damages infants more aggressively, which frequently results in deep partial-thickness and full-thickness burns. During the course of the healing process, hypertrophic scarring and contractures may appear. This must be solved through an appropriate surgery plan combined with intensive rehabilitation therapy.

Objectives: The aim of this study is to evaluate the different surgical solutions for burn sequelaes, in order to achieve the highest quality of comfort for the patient.

Methods: We have assessed the pediatric patients with severe postburn sequelaes coming from african countries who have been operated on at Cruces Hospital over the past fourteen years in collaboration with the non-profit organization “Terre des hommes”.

Results: Six females with an average age of 10.1 years were examined. The burn had occurred more than three years before in all the cases. Scission of the scarred tissue and liberation of adherences were carried out in combination with Z-plasties. In all females, this was not wide enough to cover the entire newly created raw surface so an adjacent maneuver was necessary. In four cases, we used Integra, and applied split-thickness skin grafting three weeks later. In one case, we made prefabricated flaps by introducing an expander inside the surrounding areas of the hypertrophic scarring two months before the scission surgery. In two cases, we performed regional flaps to offer higher quality tissue with more elasticity.

Conclusions: Hypertrophic scarring and contractions decrease the movement capacity of the child. As a consequence, the surgery team has to create a more extensive and floppier surface by releasing all these fibrotic tissues and by using different techniques such as Z-plasties, total skin grafting, expanders, Integra and regional or free flaps. We have to asses each case preoperatively to choose the best option.

References: