

Pre-expanded Supraclavicular Flap for Post-burn Neck Contractures

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Dear Editor,

Post-burn neck contractures may severely disrupt quality of life and cause physical and psychological deformities [1,2]. A careful preoperative evaluation is a “sine qua non” for a satisfactory outcome. Releasing of severe post-burn neck contractures is still a controversial issue in the literature, and there is no consensus among the plastic surgeons. The surgical procedure requires reconstruction with appropriate flaps. The flap used for reconstruction of a post-burn neck contracture should have a similar colour and texture of the unburned neck because it affects an individual’s personal and social life [1-3].

The basic goal of treatment is to obtain enough of a cervicomenal angle to permit functional motion of the neck. Local advancement flaps are the best choice for treatment in the mild to moderate group. Tissue expansion, free flaps and perforator flaps are used to cover the wounds, following release of mentosternal contractures.

In 1991, Achauer classified anterior neck contractures into mild, moderate, extensive, and severe, depending on what fraction of the anterior part of

the neck is involved in the contracting band [4]. Subsequently, in 2005 Onah classified the burn contractures according to the numeric categories of 1 to 4 (type 1-type 4), which encompass position, severity, and likely problems [5]. Subgroups within each numeric category are used to designate the width of the contracture, which has implications for the options available for reconstruction. The numeric category is based on the extent of flexion or extension by the contracted neck and the anatomical position of the neck [5].

Local advancement flaps, tissue expanded flaps and free flaps were used in burn patients according to the severity of the contractures [3]. In our opinion, a pre-expanded supraclavicular flap for reconstruction of extensive and severe contractures (type 3-type 4) meets all the desired parameters for management of post-burn neck contractures. It is possible to take a large flap from the supraclavicular area where other flaps may not be suitable. The donor area may be closed primarily, which is well hidden. It provides a large good-quality skin flap that may cover all the aesthetic units of the neck without a need of microvascular anastomosis.

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Received: February 04, 2012
Accepted: February 05, 2012
Arch Clin Exp Surg 2012;1: 61-62
DOI: 10.5455/aces.20120205090034

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