



Immature Scars

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Letter to the Editor

Surgery has made great progress in prolonging human lives in conjunction with other fields of medical science by saving numerous lives from the abyss of death. However, it is a long way from reaching the goal of complete repair or to recover to the state of health the individual possessed pre-injury. Beyond the goal of survival, humans possess an instinctive desire for a perfect and attractive appearance (aesthetics). Scars are considered obstacles to achieving this goal. Surgical Scar Revision (SSR) including the use of flaps and skin grafts is a valuable tool to alleviate the aesthetic/cosmetic problems faced by post-surgical patients. Moreover, medical laser devices are being increasingly used to treat scars. When the primary suture produces an acceptable result, SSR is not necessary. However, if the outcome of a primary suture is aesthetically unacceptable, SSR needs to be performed followed by Combination Laser Treatments [1-3] (CLT) immediately after suture removal. Earlier, scars were treated using single lasers; however, multiple types of lasers soon became available for scar management. By utilising unique characteristics of each laser device [2], CLT has marched a step ahead toward the ultimate goal of perfect recovery. However, in many cases, SSR and CLT need to be combined [1-4]. Optimal combinations of surgery and CLT have been reported and, in this article, we demonstrate that proper treatment of 'Immature Scars' (IS) is a crucial step toward reaching the ultimate goal of perfect repair [4]. Treatment of IS needs to be focused on effectively managing hyper vascularity, which has already been proven as a causal problem involved in the remodelling phase [5,6]. Whatever be the type of the resultant scar, reducing hyper vascularity is known to result in lesser disorganised arrangement of collagen fibres [4], a finding that suggests it is better to tackle a problem in the early stages without allowing it to get magnified than to look for a solution for a full-blown exacerbation (in keeping with the principles of prevention is better than cure). When injury compromises skin integrity and the body is at risk of invasion from exogenous organisms owing to mechanical breakdown of the skin barrier, the body activates its inherent defence mechanisms to fill in this gap in a time-saving manner [3,7]. Hyper vascularity might be an important component of this defence mechanism in addition to being a mediator in the immunological line of defence. However, modern treatment protocols devised for management of compromised protection of the skin seem to have decreased the importance of hyper vascularity in developing a rapid and urgent line of defence. Moreover, this could be a justification for the initial vascular laser treatments used for ISs. Regardless of the primary suture used for accidental injuries or elective surgeries, the master plan consisting of choosing the suture and including use of combination scar treatment (CST=SSR+CLT) needs to be established at the time the wound is first examined [3,4,8]. It is important to remember that in several cases saving the patient's life is an urgent and primary goal. In such cases, SSR needs to be planned over 6 to 12 months after primary closure with CLT to follow immediately. In the above-mentioned cases, the key role of ISs in scar treatment and the importance of reducing hyper vascularity of ISs needs to be recognised [3,4,8-10].

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