KELOIDS: INFILTRATIVE THERAPIES

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Keloids are benign fibrocitic skin tumors due to an abnormal skin response to different types of trauma: chemical (burns, chemical peelings), physical (piercing, tattoos, abrasions, not absorbable fillers), surgery, infectious (acne, chicken pox). Keloids can occur in all healing processes, also in first intention process and sometimes, spontaneously. The evolution of a skin lesion scar is regulated by two factors normally equilibrated with each other: TGF-b (cytochine transforming growth factor b) and NO (nitric oxide), both able to stimulate the production of collagen. The high occurrence rate of keloids in high skin phototypes seems to be related to oxidative stress, mainly by ultraviolet radiation, in skin cells that have a genetic mutation. Moreover, keloids more frequently occur in young than elderly patients, in part because younger dermis has greater collagen synthesis and contains more elastic fibers, causing more skin tension. Keloid has hard texture and is characterized by the overflow than the primary lesion and is considered "acellular", compared to hypertrophic scars. Inside Keloids, indeed, are found fibroblasts, which show altered anabolic activity but also a high production of collagen, due to an increase in collagenase inhibitors and more new microvessels. The expression of a gene mutation is upstream of these conditions, although not yet well identified but supported by expression of familiarity. The most affected skin areas are chest, above the sternum and ear pinnas. Once developed, keloids are difficult to treat, and have a high rate of recurrence regardless of treatment adopted. Intralesional infiltrative therapies are currently considered safe and more effective. Here is reported a clinical case of keloid scar of the sternal region, in which is tested the effectiveness of some drugs introduced more recently as a possible therapeutical approach for keloids (verapamil, netilmicin, and 10% glucose solution), compared to the most used for long time, such as triamcinolone acetonide.