

Reoperation and reirradiation therapy for keloid relapse cases

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The advent and refinement of surgical resection and irradiation combination therapy for keloids has greatly improved treatment outcomes. However, approximately 20% of keloid lesions relapse after combination therapy. To date, we have treated four keloid relapse cases with reoperation and reirradiation therapy. Two and two involved keloids on the chest wall and ear helix, respectively. Recurrence occurred between 6 and 24 months after the first combination therapy. After conferring with radiotherapists, we proposed reoperation and reirradiation therapy to the patients. The patients consented to the treatment after being informed about the risks, benefits, and complications of the therapy. All lesions were treated successfully without any major complications and were followed up for XX months. One of the chest wall keloids displayed minor re-recurrence that was extinguished with a series of local triamcinolone injections. At last follow up, all scars were mature or close to maturity. Reoperation and reirradiation therapy may be suitable for keloids that relapse after the first combination therapy because it is likely that the same pathophysiology that drives the formation of the keloids in the first place is also responsible for the relapse. Specifically, keloids may be the result of highly differentiated and activated myofibroblasts that produce excess collagen matrix, are resistant to apoptosis, and are generated by systemic and genetic factors that do not disappear after treatment. Since irradiation (and corticosteroids) appear to prevent or resolve keloid recurrence by inactivating the myofibroblasts, we believe that reoperation and reirradiation therapy is a reasonable approach for relapse patients.