

Keloid recurrence after surgical resection combined with irradiation therapy

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At present, most keloid lesions can be treated by surgical resection combined with postoperative irradiation therapy: this approach often converts these lesions into mature scars. In some cases, however, keloids recur several months after surgery. Recurrent keloid cases associate with additional problems. First, the recurrent lesions can be larger than the original lesions: this leads to more pain, itch, and psychological hardship. Second, the strategy for treating recurrent keloids is controversial. Specifically, the indications for re-irradiation after recurrence have not been defined because repetitive radiation therapy increases the risk of radiotherapy-related complications, including secondary carcinogenesis. The factors that contribute to keloid recurrence remain poorly elucidated. Here, we reviewed our recurrent keloid cases and described their characteristics, namely, the distribution of the lesions, the surgical processes that were used in the primary surgery, and the postoperative course. The overall recurrence rate was 21.6%. Chest keloids had a higher rate of recurrence (33.3%). The recurrent cases tended to have higher cutaneous tension around the scars, although this variable was not quantified. To obtain better treatment outcomes, studies that further elucidate the mechanisms that underlie keloid recurrence are needed.