

DERMATOLOGICAL SURGERY

TREATMENT OF KELOIDS BY SURGICAL EXCISION COMBINED WITH 5-FLUOROURACIL AND BETAMETHASONE INJECTION

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Background: Although numerous therapeutic approaches are available for keloids, no optimal treatment has been identified to date.

Objective: To investigate the therapeutic efficacy of surgical excision combined with 5-fluorouracil and betamethasone intralesional injection for treatment of keloids.

Materials and Methods: After approved by the institutional review board and obtaining informed consent from patients, twenty-one patients were included. Digital photographs of the keloids were taken before treatment. Complete excision of the scars was performed under local or general anaesthesia depending on the size and location of the scars and patients' wishes. The wound was then immediately closed using subcuticular suture. 4-6 intralesional injections of 0.1ml mixed solution containing 25% Betamethasone (7 mg/ml), 67.5% 5-Fluorouracil (250mg /10 ml) and 7.5% Lidocaine (2mg/ml) per 1cm-long wound were performed every 3 weeks after surgical excision when wound length within 10cm. 5-Fluorouracil and Lidocaine in mixed solution were increased proportionally according to the length for cases with wound over 10cm. The patients were monitored monthly after the treatment starting. Photographs of the lesions were taken every month for a total of 12 months. The Patient and Observer Scar Assessment Scale (POSAS) was used to evaluate therapeutic efficiency 16 months after treatment. Meanwhile Patient satisfaction was recorded, graded as disappointing, fair, good and excellent. Local and systemic side effect was also monitored at each visit.

Results: Surgical excision combined with 5-fluorouracil and betamethasone injection resulted in effective therapeutic outcome, with significant improvements of scores of each item in the POSAS, both patient scale and observer scale. 17 patients were quite satisfied with the treatment effects. No recurrence was observed. And no local or systemic side effect was observed during and after treatment.

Conclusions: Surgical excision combined with 5-fluorouracil and betamethasone



intralesional injection was effective for the treatment of keloids, providing a feasible therapeutic strategy.

