2-to-Z flap for reconstruction of adjacent skin defects

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SURGICAL CHALLENGE

Dermatologists and dermatologic surgeons frequently perform surgeries to remove skin cancers and melanoma. Patients with severe sun damage might present with numerous cancerous lesions in close proximity to one another. This scenario might result in large circular defects with an island of normal skin between lesions (Fig 1). To reconstruct 2 circular defects in close proximity, surgeons typically perform flaps that could cause areas of hypoperfusion at the tips of the flap.[1]

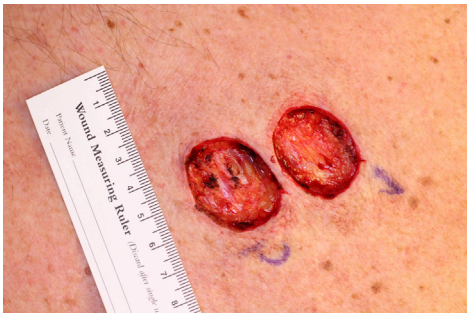

Fig 1. Two large circular defects with an island of normal skin between lesions.

SOLUTION

A simple solution known as the 2-to-Z flap can be performed to decrease areas of hypoperfusion at the tips of rotation flaps. To perform this flap, first equally divide the island of tissue between the 2 circular defects. After division of the island into 2 small tips, the surgeon can rotate the tips of the island to create 3 smaller shaped oval defects of similar surface area (Fig 2). The surgeon can then close the 3 residual smaller defects, creating a lightning bolt or Z-shaped closure (Fig 3). By performing this technique, surgeons can improve the cosmetic outcome, prevent the formation of areas of decreased blood supply, and decrease rates of edge necrosis.

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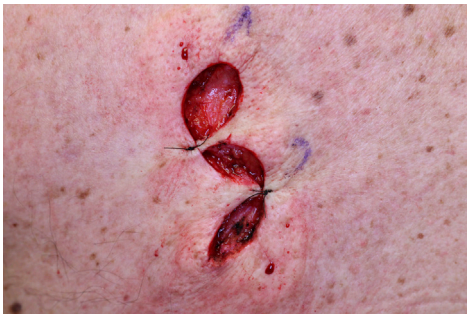

Fig 2. The tips of the island have been divided and rotated to create 3 smaller shaped oval defects of similar surface area.

Fig 3. The 3 residual smaller defects have been closed and now resemble a Z-shaped closure.

REFERENCE

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