

Important Advances in Clinical Medicine

Epitomes of Progress—Plastic Surgery

The Scientific Board of the California Medical Association presents the following inventory of items of progress in Plastic Surgery. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in Plastic Surgery which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Plastic Surgery of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to: Division of Scientific and Educational Activities,
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Removal of Commercial Tattoos of the Skin

UNTIL RECENTLY, tattoos were removed in one of five ways: (1) full-thickness excision of small tattoos, with undermining and suture closure; (2) full-thickness excision of larger tattoos, with skin grafting for closure; (3) partial-thickness excision (cutting off a split-skin graft of the area); (4) partial-thickness removal by dermabrasion; (5) partial-thickness peeling and sloughing, induced by tattooing with tannic acid paste or use of some other irritant.

Full-thickness excision is still best for small tattoos. Skin grafting for the large ones may, however, result in mismatched skin patches with border scars. On the whole, the partial-thickness removals were good for making an obscene picture or word indistinguishable, but left scattered deeper portions of the pigment visible.

In 1974, Manchester introduced superficial abrasion of tattoos followed by the rubbing in of table salt. A considerable inflammatory reaction

occurred, followed in ten days by separation of an eschar containing most, but not all, of the pigment. By repeating this it was possible to remove all the pigment.

In 1975, Clabaugh reported superficial dermabrasion of tattoos, followed by application of 2 percent gentian violet, followed two days later by daily compresses of 0.25 percent acetic acid for one hour, with dressings of antibiotic ointment in the intervening periods. Secondary spot abrasions were required in some cases, but the results were generally quite dramatic. The combination seemed to induce migration of pigment to the surface (possibly in phagocytes), once that surface was opened and was kept open.

Self-induced india ink tattoos are usually deeper and are better treated by surgical excision.

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REFERENCES

- Bailey BN: Treatment of tattoos. *Plast Reconstr Surg* 40:361-371, Oct 1967
Manchester G: The removal of commercial tattoos by abrasion with table salt. *Plast Reconstr Surg* 53:517-521, May 1974
Clabaugh W: Tattoo removal by superficial dermabrasion. *Plast Reconstr Surg* 55:401-405, Apr 1975