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## DERMATOME SHAVING OF TATTOO REACTIONS, MEDICAL FOLLOW UP INCLUDING PATIENT'S SATISFACTION

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**Aim:** To introduce and evaluate dermatome shaving of chronic tattoo reactions with respect to surgical technique, efficiency and potential sequels of surgery, including assessment of patient's satisfaction. Laser removal is relatively contraindicated since removal of tattoo pigment is likely to be incomplete and since photodegradation of pigment into hazardous chemicals and new or additional allergens may occur. Excision is limited to very small tattoos. Thus, there is a need for new surgical approaches for efficient clearing of dermal pigment from tattooed skin.

**Methods:** 50 consecutive patients with chronic tattoo reactions causing itch and discomfort were dermatome shaved to excise the culprit tattoo pigment from the outer dermis, where it is concentrated. On inclusion most patients had tried topical corticoids, which failed to be efficient. Medical follow up and a questionnaire interview was performed. The study started as an experimental approach and developed into a routine operation. Patients were included independent of the colour of the tattoo causing troubles.

**Results:** A marked decline in symptom and complaint rating was observed after shaving paralleled with high patient satisfaction. Seven patients required a second operation due to reoccurrence of the tattoo reaction at the margin of the shaved area. After change of practice with widening of the shave field slightly into the perilesional skin no reoccurrences occurred. Expected surgical sequels such as pigment variation and minor scarring of the shaved field were not noted as a problem by the patients, who prioritized being relieved from their itch and discomfort. 96% of cases needing operation suffered reactions in red tattoos deemed allergy to red azo pigment or to a hapten formed inside the outer dermis.

**Conclusion**: Dermatome shaving of chronic tattoo reactions with inflammation, skin thickening and possibly hyperkeratosis is efficient and with acceptable sequels. Patient satisfaction was high, and itch and discomfort was helped. Dermatome shaving can be recommended as fist line treatment of non infectious tattoo complications.