

AESTHETIC TATTOOS AS A TREATMENT ADJUNCT FOR SCARS FROM BURNS & TRAUMA: A LITERATURE REVIEW AND TREATMENT APPROACH



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Introduction

Aesthetic tattoos are extremely common in the UK and around the world. Medical tattoos have been employed in a variety of subspecialties across burns and plastic surgery as well as dermatology. Common examples of medical tattooing include micropigmentation to camouflage the appearance of scalp scars by tattooing an illusion of hair and also micropigmentation of vermillion scars following cleft lip procedures (1,2). Medical tattooing involves similar techniques used by highstreet tattooists.

The benefits of aesthetic tattoos for scar camouflage are often tangible but accessibility is hindered by clinicians' lack of knowledge of the tattoo sector, absence of protocols and limited medical literature on safety and effectiveness. There is no formal resource from which clinicians can draw information to advise patients whom might benefit from this intervention or who to refer to.

Aim: To establish a preliminary resource for clinicians and patients including signposting based on our literature review and experience with patients acquiring aesthetic tattoos for scar camouflage.

Case examples

Case 1: 39 year old female who sustained childhood scald burns to her chest, abdomen, right shoulder and breasts and required skin grafting. In her adulthood she underwent multiple sessions of CO2 laser to improve scar quality which helped soften the scars. She remained unhappy by hypo- and hyper-pigmentation of scars. She decided to get cosmetic tattoos over the scars on her right flank and right thigh. (fig 1 & 2)



Case 2: 31 year old man who sustained extensive childhood burns at the age of 13 and underwent grafting as well as multiple scar revision procedures over several years. He decided to get aesthetic tattoos to camouflage the scars on his arms. He was very pleased with how well the tattoos concealed the burn scars and expressed that he felt more confident. He plans on getting more tattooist before he could find one who agreed to tattoo over scars and skin grafts.



Figure 3: showing aesthetic tattoos over previous burn scars and skin grafts in forearm and hand



Discussion

We had 4 patients in total who employed this innovative technique of scar camouflage. All demonstrated aesthetic outcomes that were superior to medical intervention for scars. All patients reported high satisfaction with the scar camouflage achieved by their aesthetic tattoos.

Our literature search found that aesthetic tattoos for scar camouflage were usually a patient-initiated approach. All patients in the literature reported high satisfaction with tattoo camouflage and had positive experiences. We did not find any reports on negative experiences or complications.

The first step to making this adjunctive intervention more accessible would be to engage with tattooist to open up dialogue so as to bridge the gap between medical professionals and high street tattoo artists. In so doing they will be better able to advise patients when questioned about safety of tattooing over scars.

Considerations

Possible ways to make scar camouflage with tattoos more accessible:

- 1. Come up with a list of tattoo artists offering such services.
- 2. Develop brochures containing photographs and previous patient experiences with this approach.
- 3. Find ways of empowering clinicians to answer patients questions regarding safety and feasibility of tattooing over scars i.e. comprehensive literature search on safety of scar tattoos.
- 4. Encourage vigilance in our patients in relation to adverse outcomes following the intervention.

Conclusions

There is a lack of literature on safety or outcomes of aesthetic tattoos for scar medical camouflage and hence professionals are not easily able to advise patient regarding this. However this unconventional approach to camouflage scars can play a significant role in ending a cycle of diminishing returns from medical interventions including use of standard cosmetic camouflage. This adjunctive intervention may also positively impact on patient's selfesteem. Further consideration is needed to make this scar treatment adjunct more accessible to patients. More work is necessary including an understanding of what medical interventions might facilitate tattooing on scars.

Figure 1 and 2: Aesthetic tattoos used to camouflage extensive burn scarring in female patient.

Figure 4: Flow diagram with proposed approach to adjunctive tattooing over scars for scar camouflage. This approach ensures a cautiousness.

References

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