

Case Report

An ugly outcome of a cosmetic procedure

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Abstract Dermal fillers are being widely used for rejuvenation of soft tissues. Though usually safe and effective, a wide range of complications can occur. One such case is presented in which dermal filling of hands by an uncertified practitioner led to an ugly outcome.

Key words

Dermal filler, complications, rejuvenation

Introduction

Dermal fillers are becoming increasingly popular in the affluent sections as a means to help reverse the changes associated with aging and to return the dermis to its original youthful state. The urge to retain youthfulness is partly driven by market competitiveness in a youth-oriented corporate culture which is spreading globally. But like any other medicinal product, dermal fillers also cause a wide range of complications about which the patient needs to be made aware of before opting for any such cosmetic procedure. We also present one such case in which the patient had to suffer for more than a year due to adverse effects of dermal filling.

Case report

A 34-year-old female was seen after three months of having received an unknown temporary dermal filler injection. The filler was injected by an uncertified practitioner with the

aim of making the dorsal surface of hands plump and cosmetically more appealing (based on patient's perception of beauty). The results of the left hand were satisfactory but over the dorsum of right hand, the patient developed erythema, nodularity and aching pain within 24 hours of the procedure (**Figure 1**). These adverse features were more severe initially and showed marked improvement over time with only occasional consumption of non-steroidal anti-inflammatory drugs. The patient was reassured and imaging was planned to rule out any localized collections. However, she was lost to follow-up for a period of one year. After that period, the patient reported in emergency with a mildly tender, soft fluctuant swelling over dorsum of the affected hand. There was a 3 cmx2.5 cm area of compromised vascularity over the swelling (**Figure 2**). There were, however, no constitutional symptoms and signs. Aspiration of the swelling revealed serous fluid. The serous nature of the fluid was confirmed by biochemical analysis. Culture of fluid was negative. The patient was operated upon under general anesthesia and incision and drainage of the seroma was undertaken. The seroma cavity was thoroughly lavaged with copious amounts of normal saline. There were no postoperative complications and the hand healed with minimal residual scars and lumpiness.

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Figure 1 One month post dermal filling with erythema and edema of dorsum of right hand.



Figure 2 Same hand as in Figure 1 after one year of dermal filling showing seroma and pregangrenous patch over dorsum.

Discussion

A wide range of dermal fillers are available to bring about the rejuvenation of soft tissues¹ and in last few decades the use of these fillers has shown a sharp increase to correct scarring, wrinkles, and other depressions in the skin. These fillers may be temporary, semipermanent or permanent. In experienced hands, fillers have been found to be effective and extremely safe.² However, fillers are foreign bodies and need to be injected blindly at a certain level of the skin and hence have the potential to end up in wide range of complications.³ These complications can be immediate or delayed and range from minor e.g. bruises, discoloration, tenderness and transient swelling to major ones including lumpiness, granulomas, hypersensitivities, skin necrosis, angioembolisation, infection (including

herpes simplex virus) and cosmetic disfigurement.^{4,5} The best way of managing complications is by avoiding them by using proper technique and selection of filler as per the anatomy of the area⁶. In our case the filler was injected in the wrong planes by uncertified person as only one of the filled hands was affected ruling out hypersensitivity to drug as a cause of adverse affects. One other important factor that determines the level and kind of effects and side effects that will result from usage of dermal fillers is the period of manufacturing and the manufacturer. Depending on the severity of complication, management ranges from simple reassurance and observation to additional filler injections, medications (steroids, 5-fluorouracil) and surgical excision.^{3,8}

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