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Letter to the editor

HA DERMAL FILLER MIGRATED AFTER LIP AUGMENTATION

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To the editor,

Hyaluronic acid (HA) is extensively used for soft tissues augmentation procedures and it has become gradually more popular and common due to cultural tendencies and increasing association of the appearance of the lips with both beauty and youth. Many dermal fillers have been advised for lip augmentation, such us collagen, calcium hydroxyapatite, hyaluronic acid (1, 2), and polylactic acid, which are used as temporary fillers. Herein we would like to present a case of HA filler migrating into the superficial oi lip vermilion which caused discomfort by swelling.

Fig. 1. *Clinical aspect of lip after HA migration (Arrow).*

A female patient, V.A., 45 years old, no smoker, with no allergies to drug and food substances, came to our attention. The patient was referred to the Department of Oral surgery of University of Chieti by her dentist for the removal of a mass present in the right lip secondary to lip augmentation procedure with HA. The clinical examination of the patient revealed a single mobile mass in the right inferior lip vermilion that mimicking a soft tissue tumor, mucocele, fibroma or angioedema (Fig.1).

The mass was palpable and approximately 1 cm long and was causing discomfort, pain and swelling. The lip vermilion appeared healthy without ulcer. After discussing the options with the patient, she agreed to the removal of the HA migrated into the superficial area of inferior lip vermilion. The filler which had migrated into the lip was removed with 20 G

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needle (Fig. 2). The clinical diagnosis was swelling, and discomfort caused by chewing trauma and inability to give a kiss.

Fig. 2. *Two months after the lip augmentation procedure*

As reported in literature, the most common clinical presentation is characterized by filler migration associated to mild symptoms, swelling, fever (3-6) and abscess (4, 7) that could be involved at medium-long-term from the treatment. Moreover, the time of presentation of complications is very heterogeneous and can be immediate, after a few hours from the filler injection (8) to maximum of 14 years (3) from the treatment. On the other hand, the most common intervention for dermal filler migration was characterized by the surgical removal of the mass (5, 9, 10). An embolism represents a critical and very insidious early complication that could take advantage of hyaluronidase thrombolysis injection in the case of HA dermal filler (3).

In this case report the migration of dermal filler material to the superficial vermilion lip suggests that the filler may have migrated immediately as a result of an overfilled injection, high-pressure, high-volume, and orbicular muscle activity. This clinical case aims to increase awareness of a growing recognition of the risks of injectable dermal fillers. Possibility of complication exists less with experienced providers, and risks generally arise when the implant is performed by doctors with less experience and inappropriate techniques. Low-pressure and low-volume filler injections are recommended with more than one treatment per session to minimize dermal filler migration (11, 12). Probably the high-pressure and high-volume filler injections (1) caused a detachment of the tissues concurrently with the orbicularis oris muscle acting as a pump and moving the HA implant, causing migration into the area with a low-density tissue, such as the cheek. Indeed anatomically, lips are occupied by the orbicularis oris muscle which is a muscle capable of developing a lot of force. Also, unnecessary massaging after filler injection, an inappropriate distribution or deposition are responsible filler migration in the adjacent tissues. HA migration can be causing granulomatous inflammation or mimic a mucocele or tumor (13). In conclusion when performing dermal filler procedures in practice, is important physical recommends informing patients of the possible risks of filler migration.

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