The medical lipofilling: semi-static cannula for facial rejuvenation using the lipofilling technique

Introduction: the continuous evolution of techniques and the increasing attention towards regenerative medicine has led to a great advance towards less invasiveness. The following project is the result of a continuous study towards minimally invasive approaches in order to obtain an optimal and long-lasting result with concomitant patient satisfaction. The lipofilling and tissue regeneration techniques have led to an exponential increase of the treatments and, consequently, to an increase in medium and long-term complications. In order to limit the complications observed post-lipofilling treatment a new protocol and cannula have been created. Besides, these advances make it possible to carry out the practice with simplicity without neglecting the safety of the patient, who always remains in the first place.
Materials and Methods: the cannula adopted is composed of a double cannula with an external mandrel of 2 mm in static diameter and the 1.2 mm dynamic sampling cannula located inside. This latter has a 5 cm movement only at the tip that allows its maximum movement range. This cannula is used for small fat withdrawal using a method described below. The infiltration adopted with clein's solution and the impact adopted on tissue are minimal. These results, leading to a reduction in several complications such as seroma, imperfections of the donor site and healing time, ensures patient satisfaction.
The procedure was performed under local anesthesia and the sample is taken with 5 ml syringes. In this work, 60 patients between 25 and 76 years of age were treated.
All patients underwent the same procedure with excellent results both in terms of tissue regeneration and filling of hypotrophic areas.
This cannula, having only the tip as a dynamic part, does not cause trauma to the circulating tissue, unlike the normal cannulas that require the exit and entry movement.
Moreover, the tip, consisting of a plane with holes of diameter (???) and having a range of movement of 5 cm, allows the physician to know exactly the point of withdrawal and, consequently, to modulate both the response and the possible complications.
Results: all patients who underwent the treatment found a satisfaction rating of 100%.
10% of the selected patients had a short-term ecchymosis complication on the donor site with complete resolution in 7 days.
No middle and long-term secondary complications were found.
Conclusion: Fat withdrawal with this innovative technique leads to a pivotal safety and accuracy for both the doctor and the patient. Taken together these results, we can conclude that this cannula is an important and easy tool for correct regenerative medicine. Furthermore, we believe that this cannula can be used with greater simplicity even by physicians with reduced surgical manual skills.

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