Long-lasting fillers prove their safety

LARGE PATIENT GROUPS SHOW GOOD RESULTS WITH MINIMAL COMPLICATIONS

Two studies of long-lasting injectables have provided further data of their efficacy and safety. One study tested the longevity and quality of the aesthetic results up to three years of using a poly-L-lactic acid (PLLA) and the other study recorded the results over two years with a hyaluronic acid.

Dr Ayham Al-Ayoubi, an ENT surgeon and aesthetics practitioner, conducted the PLLA study, assessing the efficacy, safety and durability of Sculptra to return volume to facial areas over 150 weeks over which 400 patients were treated. The mean age was 39 years: 70% were Caucasian and 90% were female. Eighty per cent of the group received three to four sets of PLLA injections around four to six weeks apart.

The PPLA was injected into the mid-face and temporal fossa regions using a criss-cross and tunnelling technique, depositing the material deep into the dermis followed by a firm massage. The massage was continued twice a day for the following five to seven days after treatment.

No interruptions in PLLA treatment were noted due to adverse events. Injections were associated with nominal, localised edema that resolved within an average of three days. Small haematoma were noted in eight patients following injection and resolved within 10 days. The study notes that palpable, but non-visible and non-bothersome subcutaneous papules were observed in 22 of patients, with a mean onset of six to nine months after initial injection, 85% of which were "spontaneously resolved".

Based on clinical examination and photography performed at each session at six months and three years after the second and third session, Dr Ayoubi concludes Sculptra provides more lasting results than absorbable fillers commonly use in clinical practice, such as hyaluronic acid.

"We achieved a significant improvement with collagen stimulation and plumping up of the face, also with a faster response than the older group of 41–70," Dr Ayoubi says.

Sculptra falls in the class of a stimulatory product that creates its effect through encouraging neocollagenesis when injected. It is intended for deep tissue filling or in the dermal subcutaneous junction to firm under the skin and soften lines and wrinkles.

Injections per session and total volume of product are adjusted according to the size of the correction; however, it is recommended injections should be spaced 0.5–1.0cm apart (a cheek may, therefore, require 20 injections), with 0.1–0.2ml of product placed with each injection using a 26-gauge needle. A depot of 0.05ml per injection is preferential in the temples and upper zygoma.

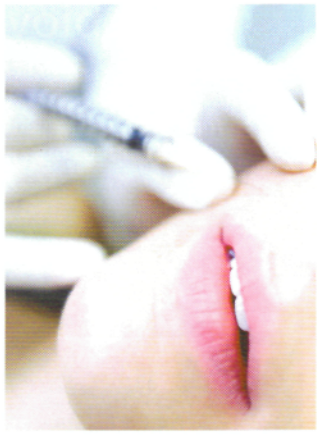
Hyaluronic acid

Dr Aref Alsoufi, a plastic surgeon and aesthetic practitioner based in Germany, tested Varioderm Subdermal for facial indications on 42 patients over two years from April 2007 to August 2009. Varioderm Subdermal was injected in subcutaneous tissue and the deep dermis, using a 26-gauge needle. Deep nasolabial and marionette folds, cheeks and cheek bones were treated mainly with subcutaneous injections.

Acute reactions such as swelling, reddening and pain were either minimal or did not occur. A pronounced volume effect and good adaptation to the tissue were observed, so that even pronounced folds could be augmented. No complications were noticed either in the short term or during check-ups after three, six, nine and 12 months, with treatment effects lasting 12–18 months.

"This hyaluronic acid has proven to be effective for 12–18 months after a single injection. The only disadvantage was a slightly increased swelling tendency during the initial phase. There were no subsequent complications. In our view, this substance represents an interesting new development in the field of fillers," Dr Alsoufi says.

There are three technologies for manufacturing hyaluronic acids. One uses a partly cross-linked portion of hyaluronic acid suspended in a non-cross-linked hyaluronic acid (bi-phasic products) to make the substance injectable. Another uses hyaluronic acid partly cross-linked (around 1–20%), of which the final product (mono-phasic) is filled into a syringe. The third uses a highly cross-linked hyaluronic acid (70–90%), which has no suspension. This is subsequently made into particles (monophasic particle technology) and stabilised to facilitate the filling of the syringes without the need for dilution.



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