

DOES FILLER ACTUALLY STAY WHERE IT'S INJECTED?

STUDY TITLE: *Analysis of Filler Spread: Facial Retinacula Play a Prominent Role*

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Leonie Schelke, Steve Harris, Jair M. Ceron, Bohorquez, Nicola Lowrey, Hugues Cartier, Ximena Wortsman, Sebastian Cotozana, and Peter Velthuis

STUDY DESIGN AND STATS:

YEAR/PUBLICATION: 2026

DESIGN: Observational study (Level of Evidence: IV)

PARTICIPANTS: 440 facial areas, 107 female patients with a mean age of 57

- Fitzpatrick scale I-III
- Exclusive to patients who had no previous facelifts / conflicting surgery, an 18-month clean slate rule from filler, and no remnants of filler

TREATMENT: tested two volumizing hyaluronic acids (HA) and three biostimulators

- HA-BDDE cross-linked and PEG cross-linked
- PLLA, CaHA, and a combo HA CaHA

KEY FINDINGS:

- Filler was directionally guided by the arrangement of the retinacula
- HA fillers spread further compared to CaHA or PLLA
- The spread is generally predictable until injection exceeds $\approx 0.2\text{-}0.3$ mL in a single deep bolus, filler may “overflow” afterwards into adjacent areas
 - In lateral jawline & forehead → filler flowed **laterally**
 - In the maxilla & midface → filler flowed toward center of the face and **downward**

Limitations to keep in mind

- No male patients nor any patients beyond Fitzpatrick skin types I-III
- Only studied uncompromised skin
 - Limitations makes it difficult to apply to other patients

Significant takeaways

- Injectors can adjust entry points when injecting rather than focusing on injection angle or tool choice in order to be more cautious of the spread
- Anatomy will dictate the outcomes more than technique

PRODUCT TYPE	AVERAGE SPREAD
HA-BDDE	2 cm
PEG	1.9 cm
CaHA	1.1 cm
PLLA	1.3 cm