

VoiceInject®

Autologous fat as a filler for glottal insufficiency





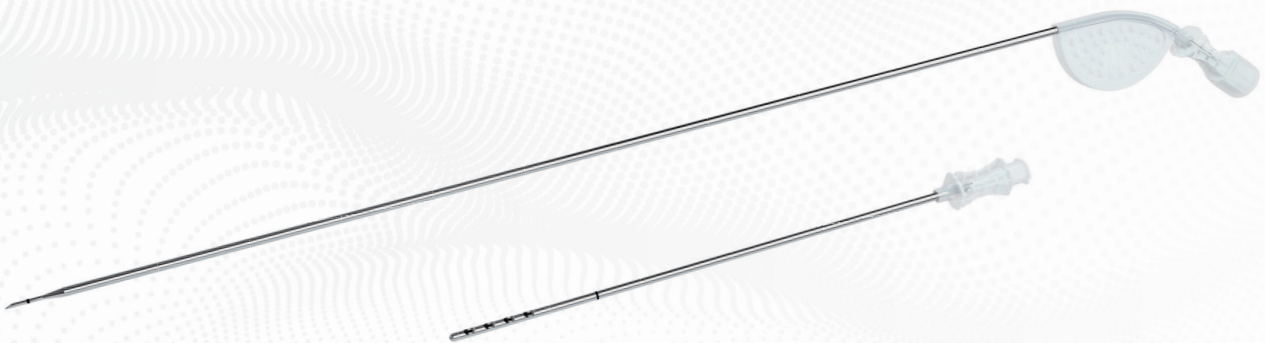
VoiceInject® – Autologous fat as
a filler for glottal insufficiency

VoicelInject®

Vocal fold augmentation has been an established and effective method of treating glottal insufficiency for years.

It is a minimally invasive procedure that quickly restores the patient's natural voice. Patients themselves favour this procedure because of the high level of biocompatibility due to using their own body fat.

SPIGGLE & THEIS developed **VoicelInject®** for the successful and patient-friendly treatment of glottal insufficiency.





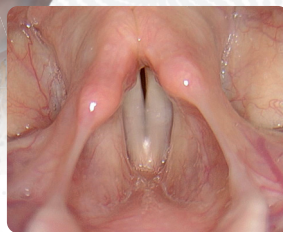
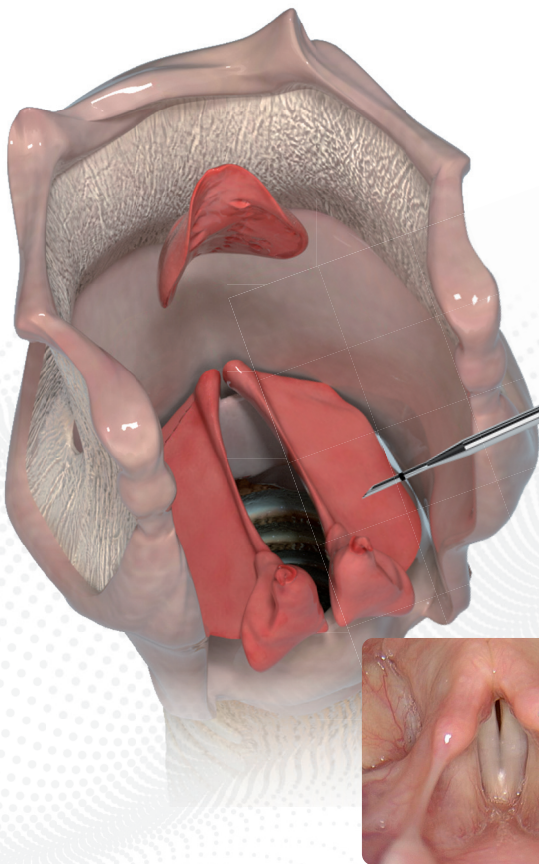
Prof. Dr. Markus M. Hess
MEDICAL VOICE CENTER, Hamburg, Germany

» Autologous fat tissue is unique because it is a combination of a resorbable and a permanent component. «

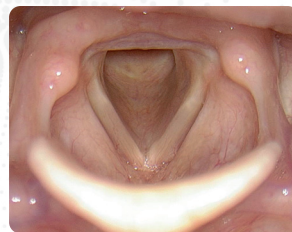
Vocal fold augmentation is a safe and effective treatment method to improve vocal quality when the glottis does not close completely. Patients appreciate the use of endogenous material, such as autologous fat. Autologous fat demonstrates good elastic properties and is fully biocompatible. Augmentation can be performed bilaterally on vocal folds.

Medical indications:

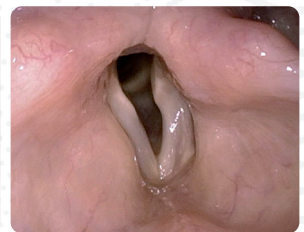
- Presbyphonia
- Scarring
- Chordectomy
- Vocal fold atrophy
- Recurrent nerve paresis



Closed vocal fold



Opened vocal fold



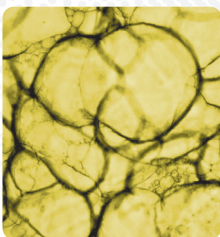
Unilateral vocal fold palsy

Source: MEDICAL VOICE CENTER, Hamburg, Germany



Advantages:

- Autologous fat for optimal biocompatibility
- No injection of synthetic material
- Minimally invasive treatment with maximum patient comfort
- Injection and harvesting cannula designed for optimal application and protection of the harvested fat cells
- Sterile system



Ideal filler for use in the human body

- Biocompatible autologous tissue
- Easily harvested
- Long term benefit

Human fat cells



Scan QR code
to watch the video




Injection Needle

Special attention has been given to the careful transport and injection of fat cells into the vocal folds. Thanks to the high-volume design and extra thin cannula wall, VoicelInject® makes it easy to inject fat cells without damaging them.

Properties

- High-volume lumen to protect the harvested fat cells
- Facet cut for simple and safe injection into the vocal fold
- Optimal length for transoral injection, working length 263 mm, overall length 332 mm
- Needle tip: 8 mm with marking of the injection depth at 5 mm
- Removable handle
- Luer Lock connector



WL 263 mm, OD Ø 2 mm, ID 1.6 mm



8 mm, OD Ø 0.9 mm

Length marking at 5 mm

VoicelInject®-Injection needle, 1 piece

3080-1000-01

VoicelInject®-Injection needle, 5 pieces

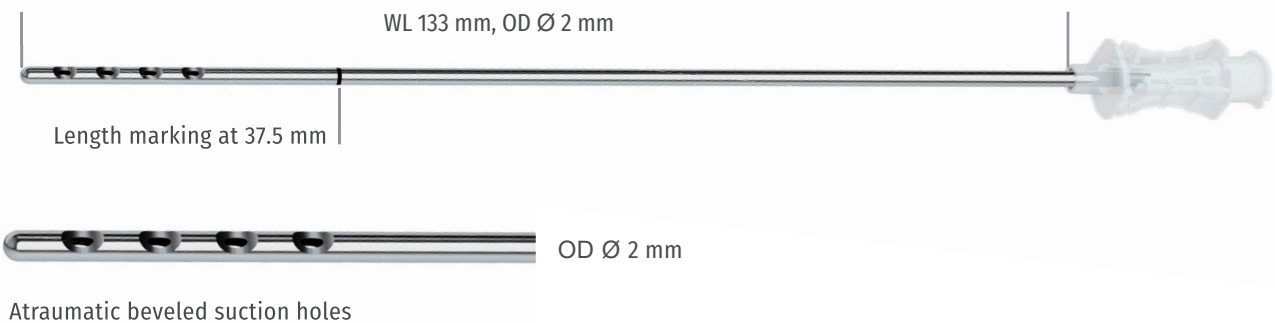
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Lipo Harvesting Cannula

Careful harvesting is crucial to ensure successful and longer lasting autologous fat augmentation in the vocal folds. In addition to a low level of negative pressure when harvesting, the special shape, arrangement and cut of the suction holes ensure safe harvesting of the fat cells. Once harvested, the cannula tube provides the fat cells with enough space, so that they can be drawn up into the syringe, without higher pressure.

Properties

- Atraumatic beveled suction holes on the cannula tip
- Low suction pressure, thanks to manually build-up pressure
- Special arrangement of the suction holes
- Harvesting cannula with large-volume inner shaft
- Length marking at 37.5 mm



The Lipo Harvesting Cannula is only available as a component of the **Lipo Harvesting-Set**.

Lipo Harvesting-Set

- 1x lipo harvesting cannula
- 1x 14G cannula
- 4x 10 ml syringes
- 4x 1 ml syringes
- 1x Discofix® C (connector for fat transfer)
- 4x Luer Lock plugs
- 4x push-in stoppers

3080-0100



Benchtop Centrifuge

- 6-fold swing-out motor
- 6 tubes
- Small and light weight
- 200-240V/50-60Hz

Hettich EBA270 *

* Please contact your local SPIGGLE & THEIS representative for further information



Application and Handling of the VoicInject®-System

Step 1: Fat extraction

- Sampling of homogeneous fat tissue with extraction system



Step 2: Preparation of the extracted fat tissue

- Use centrifuge to separate harvested tissue (max 3000 rpm for 3 minutes). Drain blood cells, serum, free fatty acids and cell debris and keep the fat tissue



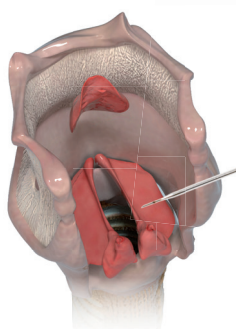
Step 3: Transfer fat tissue

- Transfer fat tissue into 1 ml syringes using the connector



Step 4: Micro re-injection

- Inject fat tissue into the vocal folds as needed



[Indian Journal of Otolaryngology and Head & Neck Surgery](#)

November 2018, Volume 71, Pages S38–S41

Gandhi, S., Gupta, S., Bhowmick, N. et al.
Autologous Fat Augmentation in Post Type III Cordectomy Patients.

[Acta Otorhinolaryngol Ital.](#)

June 2018, Volume 38, Pages S204–S213

A Ricci Maccarini, M Stacchini, F Mozzanica, A Schindler, E Basile, G DE Rossi, P Woo, M Remacle, M Magnani
Autologous Fat Augmentation in Post Type III Cordectomy Patients.

[European Archives of Oto-Rhino-Laryngology](#)

May 2019, Volume 276

van den Broek, E.M.J.M., Heijnen, B.J., Hendriksma, M. et al.
Bilateral vocal fold injection with autologous fat in patients with vocal fold atrophy with or without sulcus.

[JAMA Facial Plast Surg](#)

December 2019, Volume 21, Pages S526–S534

Kariem Sharaf, Antonia Kleinsasser, Sabina Schwenk-Zieger, Olivier Gires, Henrik Schinke, Vera Kohlbauer, Mark Jakob, Martin Canis, Frank Haubner
Molecular Characterization of Lipoaspirates Used in Regenerative Head and Neck Surgery



