

## In conclusion

This technique is now the preferred aesthetic solution compared to:

- A difficult and distressing surgery.
- A fat injection (otherwise known as lipostructure) beneath the skin in the armpit which can also add volume to the thorax. This filler does not restructure. It also dilutes in the body and its side effects, which are more or less long term, are unknown at present.
- The short term results of hyaluronic acid-based fillers.

For the patient, this technique is comfortable and safe whilst for the surgeon it is simple and accurate.

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## CUSTOM MADE IMPLANTS FOR THORACIC CORRECTIVE SURGERY

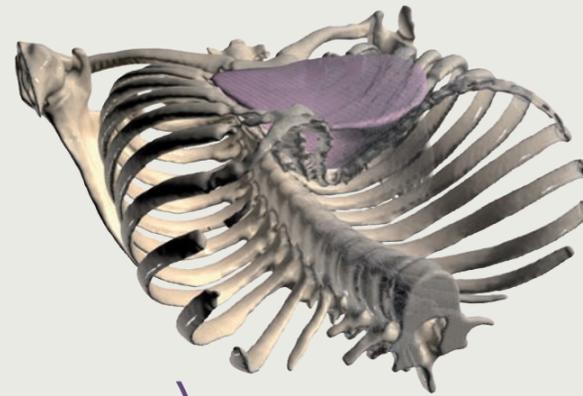


SEBBIN PARIS  
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Recreating harmonious bodies for a new vision of rebirth.

# A targeted response

In order to provide a targeted response to reconstructive surgery, the Sebbin Laboratories focused their attention on thoracic corrective surgery: pectus excavatum (hollowed chest), Poland's syndrome and any other physical deformity. The Laboratories worked with their specialist partners to create computer-based 3D technology to make custom made implants. An implant can therefore be customised, whether in terms of shape or firmness, using a print or scanned image. Making custom made silicone implants using a computer-based system is an innovation that the Sebbin Laboratories are committed to offering their surgeon partners for the benefit of their patients.



# The advantages

There are several advantages to the patient choosing this prosthesis. It moulds perfectly to the area concerned. This ensures:

- Easy fitting.
- Greatly increased prosthesis stability.
- Reduced risk of hematomas and effusions.
- Simpler post-operation follow-ups.
- Improved aesthetic results.
- Improved care management for complicated cases. This system means that accurate custom made implants for the hard to reach thoracic areas can be made. It enables us to work remotely.
- Prolonged implant life expectancy.
- Choice: a flexible gum to facilitate introduction or a firmer gum for other cases.

# The Pectus Excavatum

Pectus Excavatum is the most common congenital thoracic deformity and occurs in approximately 1/300 cases.

It is most common in men with a ratio of 3:1 whilst the ratio for women is 6:1.

Nowadays, 15% of those with a hollowed chest are operated on from the age of 14 and upwards.



Patient prior to hollowed chest operation

Correction following custom made implant fitting

Period of hospitalisation\*:  
Average 5.6 days.

Satisfaction: 85.4%  
Death rate = 0

\*see bibliography (1)

# A 4 STEP PROCESS

## STEP 1: HOSPITAL

- A plastic surgeon makes the diagnosis.
- A scan is made with the arms along the body.
- The scan (DICOM cross-sections produced by medical tomography) is sent to the Sebbin Laboratories by post or email along with the prescription (request template letter from the sales administration department).
- The practitioner completes the prescription.

## STEP 2: SEBBIN LABORATORIES

- Sebbin Laboratories' sales department draws up a quote.
- The quote is returned with the practitioner's signature before the custom made implant is made.
- A virtual 3D model of the patient's thorax (including bone, cartilage, muscle and platysma tissues) is produced.
- The practitioner assesses the 3D model to approve its shape and volume prior to production. A prototype is produced using stereolithography which helps to make the mould.
- The custom made prosthesis is tailor-made to suit each patient's anatomy. Each prosthesis is unique!
- The prosthesis is produced, sterilised and sent to the practitioner as part of standard procedure (within a period of 2 months).

## STEP 3: OPERATION

## STEP 4: DATA CONFIDENTIALITY

All data relating to the production of the prosthesis is kept safe and archived by Sebbin Laboratories.

## SUMMARY

- 1: Area scanned
- 2: Prescription completed
- 3: Quote accepted
- 4: Scan file saved in software
- 5: 3D model approved
- 6: Prototype and mould created
- 7: Implant produced
- 8: Implant delivered to surgeon/implantation