# SRSinfo.Org | Slipping rib syndrome Info®

**As surgical procedures for treating SRS continue to evolve, the following provides brief explanations of SRS surgical procedures.** Updated May 2026.

**It's important to acknowledge that every individual has a unique anatomy and medical history. If you are considering an SRS surgical procedure, your surgeon should develop a personalized surgical plan tailored to your specific needs. Additionally, they should provide clear explanations of the surgical methods under consideration, which may include resection, suturing, plating, or combinations thereof. Understanding how each method contributes to successful surgical outcomes is crucial for your overall care.**

## IMPLANT/PROSTHESIS/PLATE PROCEDURES: (newest first)

### PEEK Implant System - permanent (TBA)

Controlled rib spacing while retaining natural rib mobility. Its patented design features engineered geometry for optimal rib stabilization and spacing, preserving natural movement, reducing recovery time, and enhancing comfort. The device attaches to bone and cartilage, allowing surgeons to use screws or sutures based on case needs and rib quality. Additionally, adjustable sizing through material processing, permanent deformation, and frangible connections simplifies procedures by providing flexibility and adaptability to each patient's anatomy. PEEK (poly-ether-ether-ketone) is a high-performance thermoplastic mimicking human bone elasticity.

### Custom PEKK Implant/Prosthesis (TBA)

The process involves customizing an individual's anatomy using 3D printing with PEKK (Poly-ether-ketone-ketone), a semi-crystalline thermoplastic in the polyaryletherketone (PAEK) family. Often, technologies like OsteoFab® offer lightweight, biocompatible, and radiolucent implants. These patient-specific implants match bone stiffness to reduce stress shielding and feature superior osseointegration. This material is securely attached to stable cartilage/rib using self-drilling titanium screws.

### Custom PEEK Implant/Prosthesis -permanent (TBA)

The process involves customizing an individual's anatomy using 3D printing with PEEK (poly-ether-ether-ketone) material. PEEK is a high-performance thermoplastic polymer that mimics the elasticity of human bone. This material is securely attached to stable cartilage/rib using self-drilling titanium screws, allowing for convergent biaxial fixation. (drill-free, monocortical locking screws.)

### Stratos titanium clips and connecting bars -permanent

The titanium rib clips are selected based on the anatomical situation and placed on the hypermobile ribs without screws, allowing movement with the ribcage.

### "H" Titanium plate procedure -permanent (Currently available in the UK only from Mr. Ian Hunt.)

Cartilage is removed from the slipped rib(s), and short customized sections of a titanium plate are placed vertically and secured by titanium plates screwed to the hypermobile ribs.

### PEEK plate procedure -permanent

The PEEK (polyether ether ketone) plate, a high-performance thermoplastic polymer with an elasticity similar to that of human bone, is cut to the required length. It is securely attached to the stable cartilage using self-drilling titanium screws for convergent biaxial fixation. (drill-free, monocortical locking screws.)

### Titanium plate procedure -permanent

Customized sections of a titanium plate are positioned vertically and secured firmly to the stable cartilages/ribs using titanium screws. This method enables drill-free monocortical locking screws to stabilize the hypermobile costal cartilage/ribs.

### Titanium Mesh & Plate procedure -permanent

The pre-contoured titanium mesh implants feature a mesh secured by titanium plates screwed to the bone. This mesh is flexible and cannot compress in on itself, preventing the ribs from slipping. The titanium plates are positioned horizontally along each rib. Currently available in the UK.

### Polypropylene Mesh -permanent

Nonabsorbable and permanent, this material is constructed from the same knitted polypropylene monofilament as Polypropylene Suture. It resists degradation by tissue enzymes and maintains its strength indefinitely, helping to stabilize the costal cartilages/ribs.

### Modified costal margin reconstruction procedure without the bioabsorbable plate (known as 3.0)

Resection/Excision of Costal Cartilage is used as a spacer/graft, secured with permanent sutures, to stabilize without a bioabsorbable plate.

### Modified costal margin reconstruction procedure (known as 3.0)

Cartilage is resected from the slipped rib and used as a spacer/graft. An injection of demineralized bone matrix is then applied around the area. Following this, two short customized sections of a biosorbable plate are positioned and anchored to a stable rib above using permanent sutures for stabilization.

**Costal margin reconstruction procedure** (known as 3.0)

Cartilage is resected from the slipped rib and used as a spacer/graft. The BioBridge (biosorbable) long plate is then positioned vertically through the ribs and anchored to the stable ribs to stabilize the costal margin, with permanent sutures securing it in place.

## SUTURE PROCEDURES-PERMANENT

**Method 1**: Two Figure "8" nonabsorbable permanent sutures are placed ***around*** the cartilages/ ribs to anchor the rib above to stabilize the slipped rib. (Known as 1.0)

**Method 2:** Two Figure "8" nonabsorbable permanent sutures are placed ***through*** the cartilages /ribs to anchor the rib above to stabilize the slipped rib. (Known as 2.0)

Note: Sutures that are suitable for SRS are:
TigerTape and FiberTape sutures: high–strength suture has a long-chain polyethylene structure.
Ethibond sutures: composed of polyethylene terephthalate.

## RESECTION/EXCISION OF COSTAL CARTILAGE / RIB

Excising the hypermobile tip of the costal cartilage or rib(s) that are causing damage or irritation to the intercostal nerve above.