

**As surgical procedures for treating SRS continue to evolve,
the following are brief explanations of SRS surgical procedures.** Updated: Nov. 2025.

It's important to understand that everyone has a unique anatomy and medical conditions.

If you are considering the SRS procedure, your surgeon should develop a personalized surgical plan that addresses your specific needs. They should also provide clear explanations for the chosen surgical procedures, such as resection, suturing, plating, or combinations of these methods, and how these approaches will contribute to successful surgical outcomes.

Resection- Costal Cartilage Excision

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

Suture procedures-permanent

1. Two Figure "8" nonabsorbable permanent sutures are placed **around** the cartilages/ribs to anchor the rib above to stabilize the slipped rib. ("1.0")
2. Two Figure "8" nonabsorbable permanent sutures are placed **through** the cartilages /ribs to anchor the rib above to stabilize the slipped rib. ("2.0")

Plate procedures: (newest first)

Custom PEEK Prosthesis -permanent (TBA)

The process involves customizing an individual's anatomy using 3D printing with PEEK (polyether 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 using self-drilling titanium screws, allowing for convergent biaxial fixation. (drill-free, monocortical locking screws.)

Stratos reconstruction with titanium clips and connecting bars -permanent

The titanium rib clips are selected according to the anatomical situation and placed on the hypermobile ribs without screws.

"H" plate procedure -permanent

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.

Currently available in the UK.

PEEK plate procedure -permanent

The PEEK (polyether ether ketone) plate, a high-performance thermoplastic polymer similar in elasticity to 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 cartilage using self-drilling titanium screws for convergent biaxial fixation. This method enables drill-free monocortical locking screws, stabilizing the hypermobile costal cartilage/ribs.

Titanium Mesh & Plate procedure -permanent

The pre-contoured titanium mesh implants feature a titanium mesh that is 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, ensuring they do not compromise your flexibility.

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.

Cartilage for a spacer with permanent sutures

A resection of cartilage from the slipped rib is used as a spacer/graft, secured with permanent sutures, to stabilize it.

Biosorbable plate with resected cartilage as a graft procedure.**1. Modified costal margin reconstruction "3.0" procedure:**

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 customized sections of a biosorbable plate are positioned and anchored to a stable rib above using permanent sutures for stabilization.

2. Costal margin reconstruction "3.0" procedure:

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, using permanent sutures to hold.