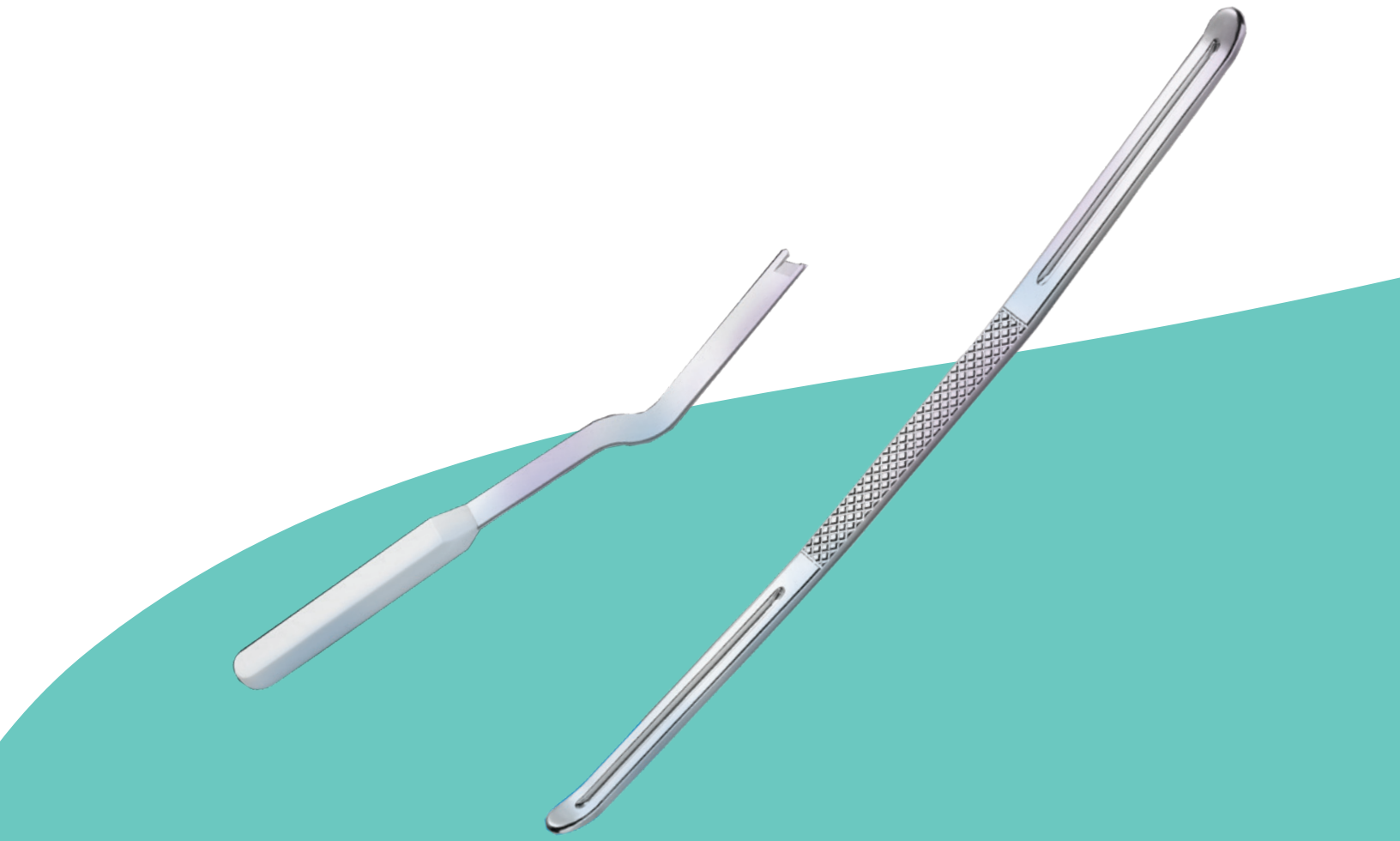
Smith+Nephew

SAFEGUARD◊

Mini Carpal Tunnel Release System

Surgical Technique



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Nota Bena:

The following technique is for informational and educational purposes only. It is not intended to serve as medical advice. It is the responsibility of treating physicians to determine and utilize the appropriate products and techniques according to their own clinical judgment for each of their patients. For more information on the product, including its indications for use, contraindications, and product safety information, please refer to the product's label and the Instructions for Use packaged with the product.

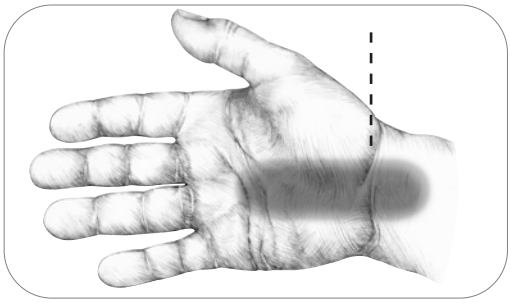


Figure 1-1

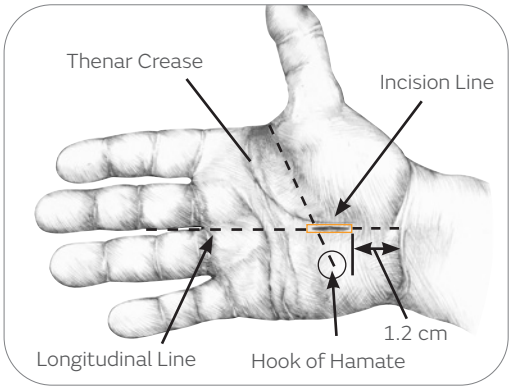
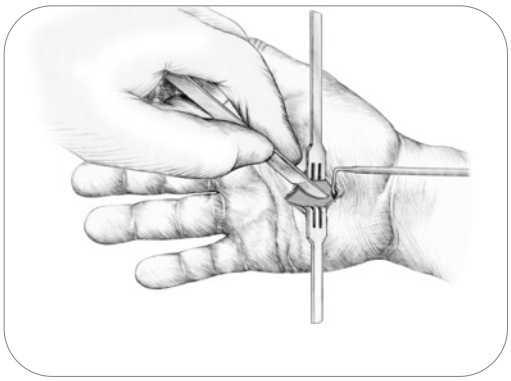


Figure 2-1



Surgical technique

Step 1 ▪ General recommendations

1-1 If local anesthesia is elected, inject into the midline of the proximal palm to the proximal flexion wrist crease.

1-2 Anesthesia should infiltrate both the carpal tunnel and subcutaneous tissues, taking care not to injure the median nerve.

Step 2 ▪ Pre-operative planning

2-1 Draw a line across the palm from the proximal-most extent of the first web space toward the hook of the hamate (Kaplan's line).

2-2 Draw a second line longitudinally from the radial border of the ring finger proximally.

2-3 The junction of these lines represents the center of the incision. Draw a 1.5-2cm line through this junction to mark the incision. It should stop about 2cm distal to the wrist flexion crease (slightly ulnar to the thenar crease).

Step 3 ▪ Incising skin and Palmar Aponeurosis

3-1 After tourniquet exsanguination of the upper extremity, use a #15 blade to incise the palmar skin, coursing through skin and subcutaneous fatty tissue exposing the palmar aponeurosis.

3-2 Spread the palmar aponeurosis exposing the transverse carpal ligament at its distal portion. Care should be taken not to damage the vascular arch.

3-3 Use either a self-retaining retractor or two Senn retractors transversely and one Ragnell retractor proximally, to expose and identify the distal portion of the transverse carpal ligament.

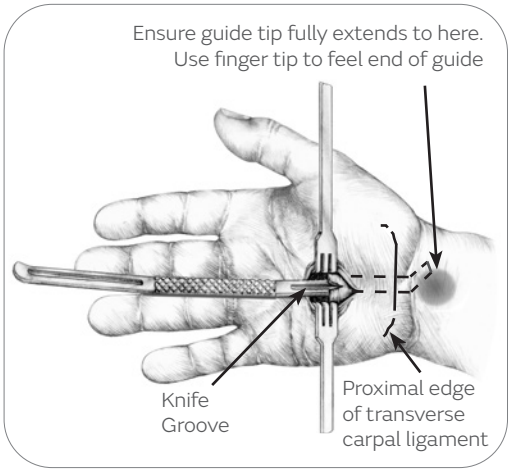


Figure 5-1

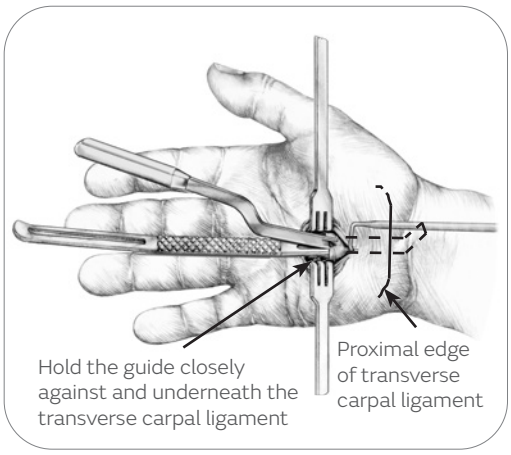


Figure 6-1

Step 4 ▪ Incising Distal Portion of Transversal Carpal Ligament

4-1 Under direct visualization, divide the transverse carpal ligament longitudinally as far proximally as possible with dissecting scissors taking care to avoid injury to the carpal tunnel contents.

Step 5 ▪ Aligning cutting guide

5-1 Pass either the large or small end of the Knife Guide proximally underneath the remaining portion of the transverse carpal ligament.

5-2 The curved tip of the guide should pass proximally and always be in contact with the undersurface of the transverse carpal ligament until it reaches beyond the proximal extent of the ligament itself. Keep the guide as ulnar in the carpal tunnel as possible and avoid pointing it radially.

Step 6 ▪ Cutting knife alignment

6-1 After ensuring an appropriate passage of the guide, (without tissues between the ligament and the guide itself) hold the guide closely against the transverse carpal ligament. Place the carpal tunnel knife into the dedicated guide's knife groove.

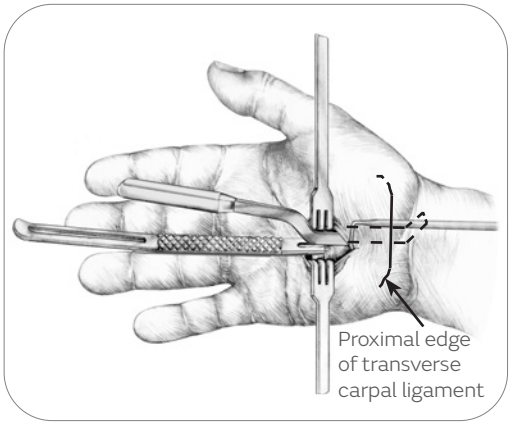


Figure 7-1

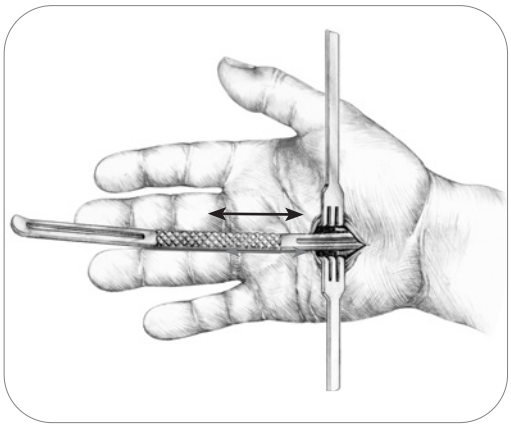


Figure 8-1

Step 7 ▪ Complete release

7-1 Advance the knife along the groove proximally to complete the release of the transverse carpal ligament. The knife should not advance past the end of the groove on the guide.

Step 8 ▪ Ensuring complete release

8-1 After the knife has been retracted, use the guide to probe the transverse carpal ligament to ensure complete release.

Step 9 ▪ Closure

9-1 After the wound is irrigated, the tourniquet is released and hemostasis is achieved. Close the wound with nonabsorbable suture and apply a soft sterile dressing that permits full motion of the digits.

Postoperative care

Patients are encouraged to perform range of motion exercises postoperatively, although heavy lifting should be avoided.

Sutures are generally removed in 7-14 days at which time patients are counseled in the progressive use of their hand over the ensuing weeks.

Instrumentation

Instrument set

SAFEGUARD Mini Carpal Tunnel release system

Catalog number	Description
Guide	
08-0001	SAFEGUARD Guide
Cutting Knife	
08-0003	SAFEGUARD Knife
08-0005	SAFEGUARD Knives (set of 5)

Component materials

Guide
316L Stainless Steel as per ASTM A276
Knife
Handle: Polyethylene PE955I
Blade: Stainless Steel (modified AISI.SAE 51440 A)

Precautions

Surgeons using this device should be familiar with the recommended surgical technique and the required surgical instrumentation.

Packaging and sterility

- Each knife is provided sterile in packaging and is a single-use, disposable product.
- The guide is non-sterile and must be removed from packaging and autoclaved prior to surgery.

Notes

Surgical Technique
Smith+Nephew does not provide medical advice and does not recommend this or any other surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and using the appropriate techniques for implanting the device in each patient.

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32731 V2 LC-04-0008-0001 REVB 12/22

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