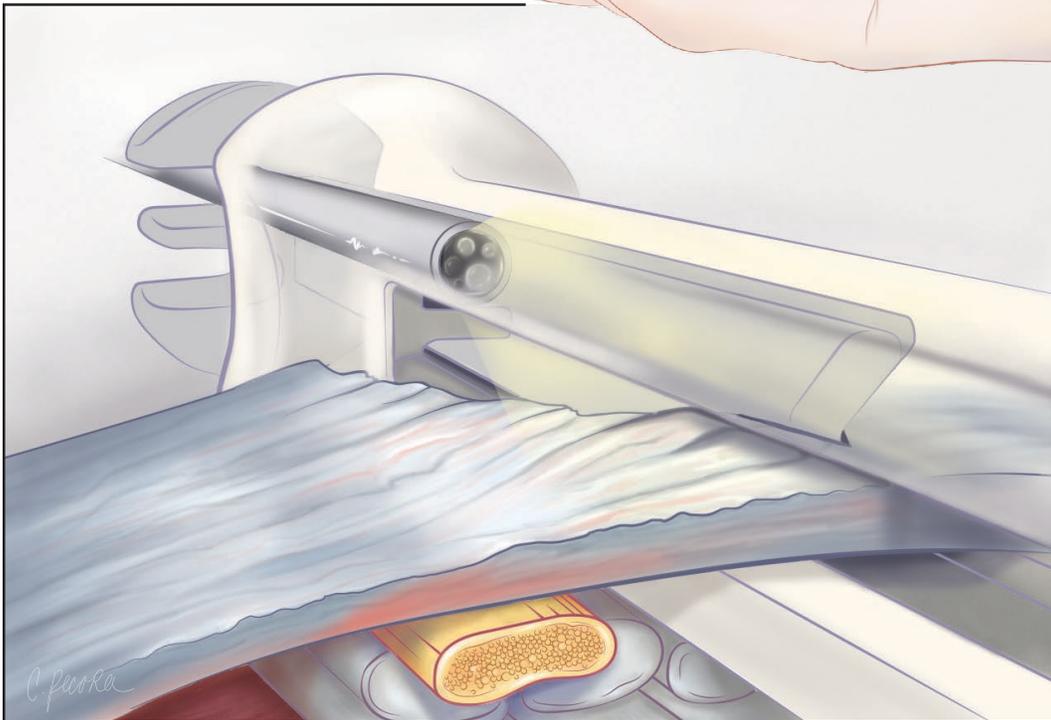
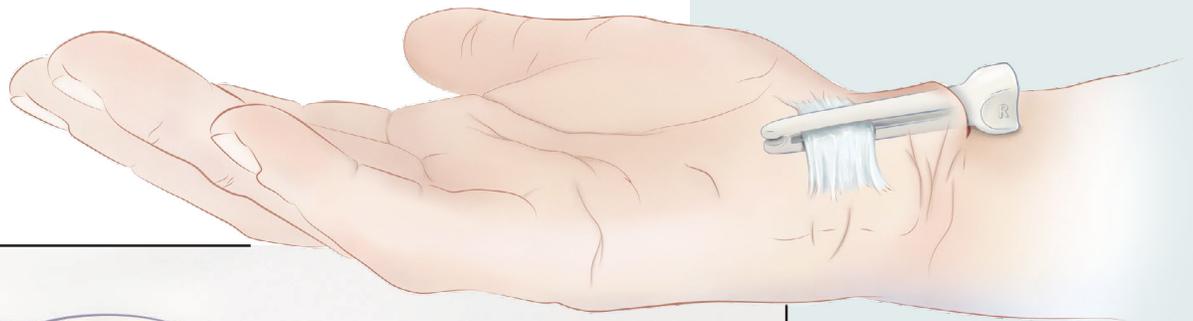


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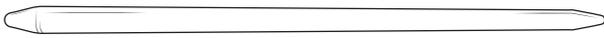
Carpal Clip



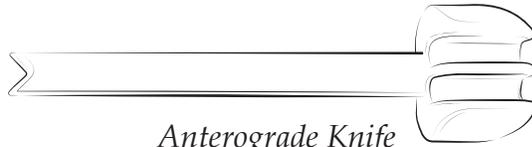
Surgical technique guide
Endoscopic carpal tunnel release

Instrumentation

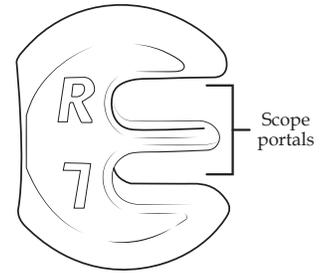
AT18-0000



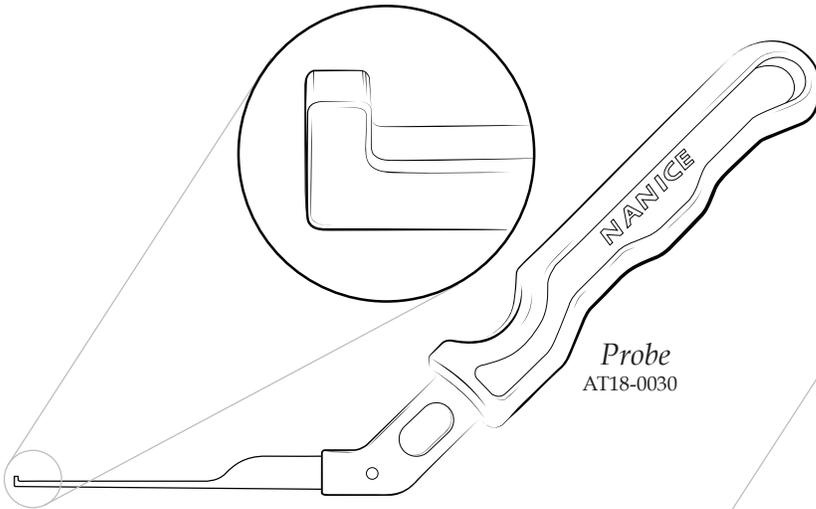
Dilator
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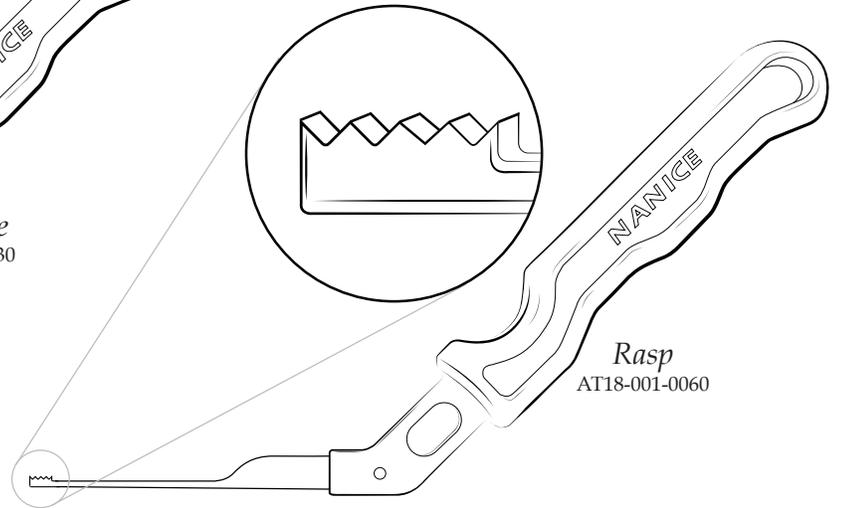
Anterograde Knife
AT18-0040



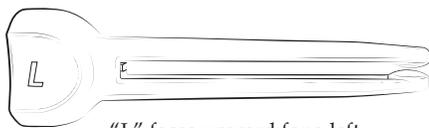
Scope portals



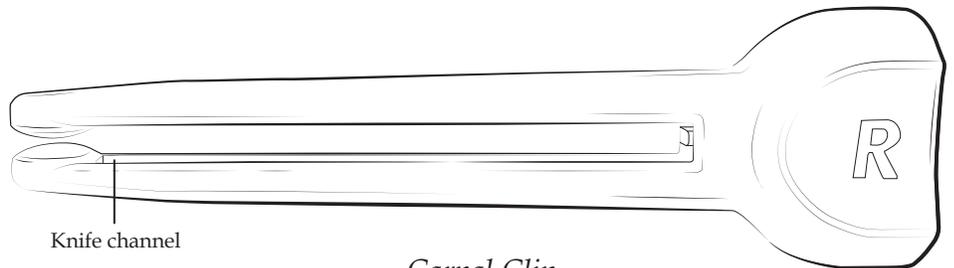
Probe
AT18-0030



Rasp
AT18-001-0060



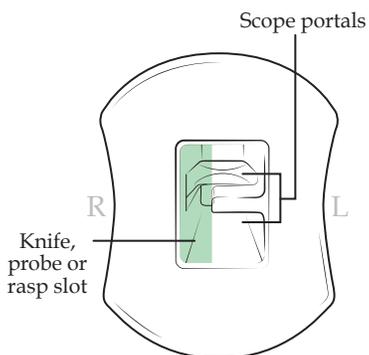
"L" faces upward for a left carpal tunnel release



Knife channel

Carpal Clip
AT18-0020

"R" faces upward for a right carpal tunnel release



Scope portals

Knife, probe or rasp slot

The Carpal Clip can be used to perform both right and left carpal tunnel release procedures.

Note: The knife slot will always be on the ulnar side of the hand, whether a right or left carpal tunnel release.

Surgical technique

Incision

Make a 1 cm transverse incision, 1 cm proximal to the distal wrist crease and ulnar to the palmaris longus. Incise and resect the superficial forearm fascia proximal for 2 cm.

Dilation

Upon dilation of the carpal tunnel, palpate the palm to feel the distal point of dilator and make mental mark. In general, this mark will be in line with the 3rd web space. This mark will be your visual for dilating a pathway when you dilate above the transverse carpal ligament for the subcutaneous channel. It is important to create a subcutaneous channel that is parallel to the carpal tunnel

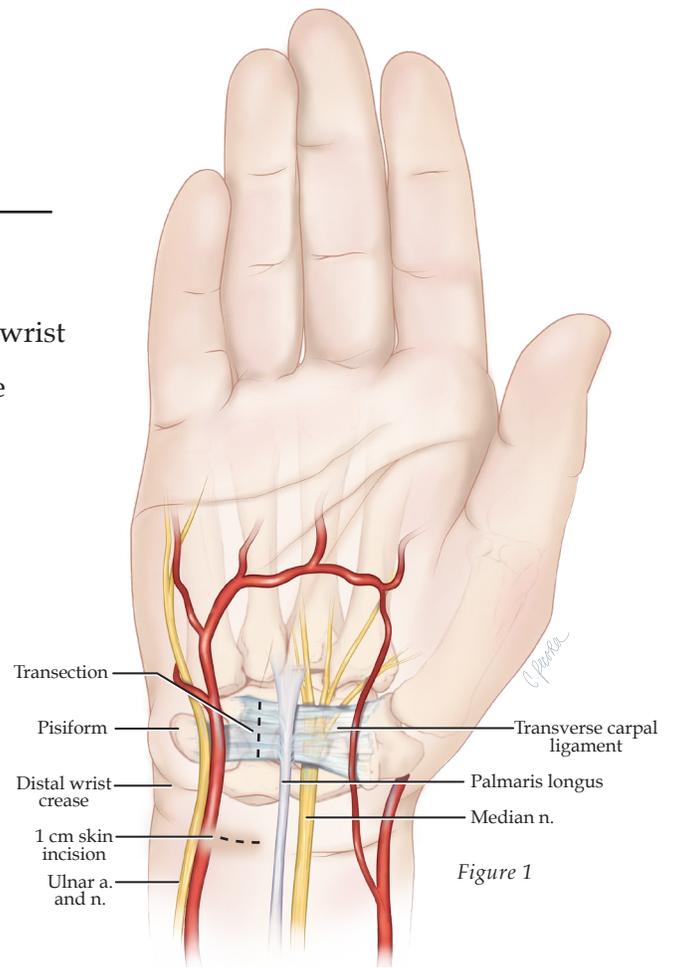


Figure 1

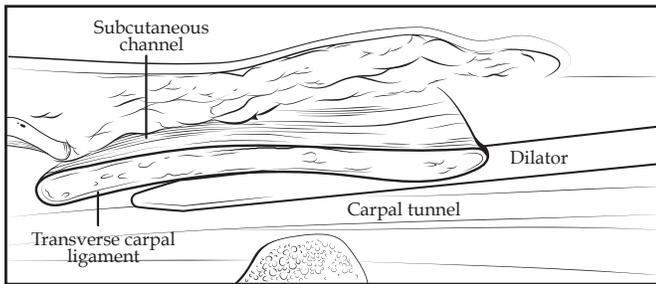


Figure 2a - Lateral view of dilation in carpal tunnel

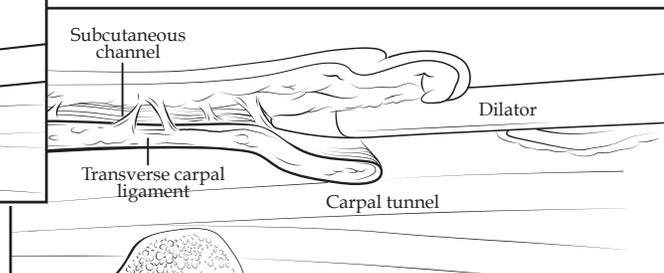


Figure 2a - Lateral view of dilation in subcutaneous channel

to prevent divergence of the carpal clip arms. This will allow for easy insertion of the Carpal Clip and for smooth gliding of the anterograde knife within the clip.

Placement of Carpal Clip

Remove the dilator and place the Carpal Clip guide with one sleeve in the carpal tunnel and the other in the subcutaneous channel just created. Place the device such that the appropriate letter is upright on the device (i.e. the "R" is facing up for a right carpal tunnel release). The knife slot should be ulnar to the two scope portals.

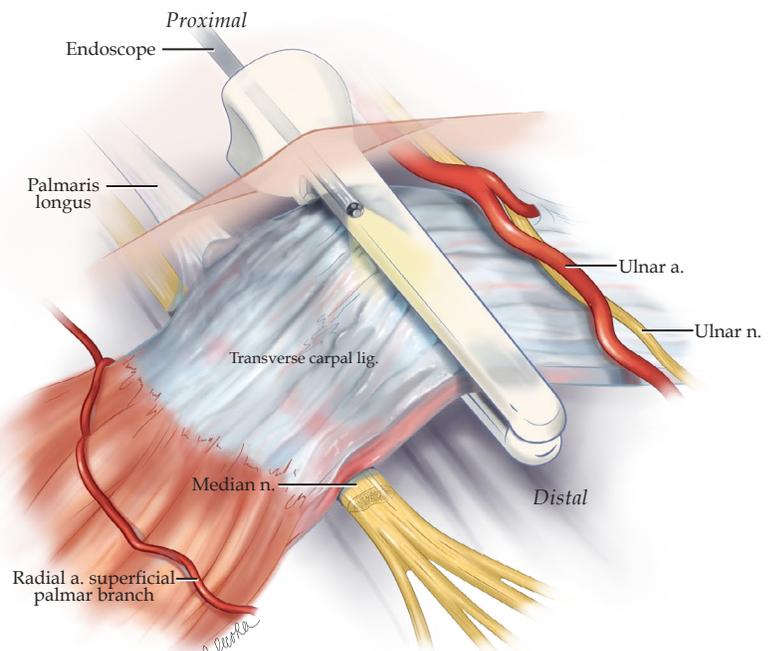


Figure 3

With the Carpal Clip in place, insert a 4 mm or smaller scope in one of the two scope portals that are radial to the knife slot. The two scope portals will allow visualization of the ligament both superficial and subsynovial.

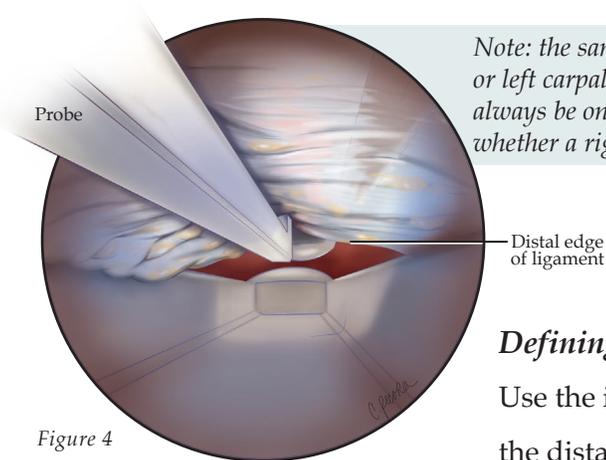


Figure 4

Note: the same device can be used on a right or left carpal tunnel release. The knife slot will always be on the ulnar side of the hand, whether a right or left carpal tunnel release.

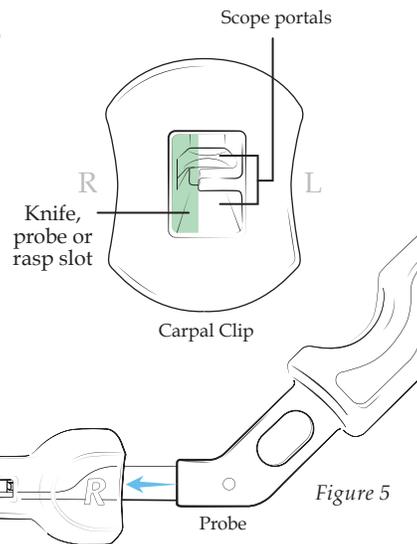


Figure 5

Defining

Use the included rasp to remove any synovium and the probe to define the distal edge of the transverse carpal ligament. If you cannot identify the distal edge from within carpal tunnel, then slide the guide distally

until you can grasp the distal edge of ligament with the probe. After you have confirmed a clear channel superficial and deep to the transverse carpal ligament and you have defined the distal edge, the ligament is ready to be transected.

Transection

Place the anterograde knife (V-shaped blade) over the scope such that the knife blade is aligned with the knife slot on the Carpal Clip guide. Then proceed to slide the knife distally until transection is complete.

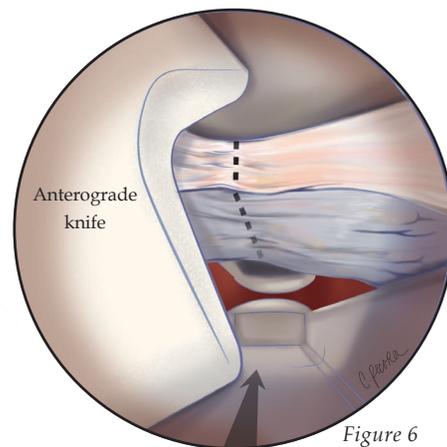


Figure 6

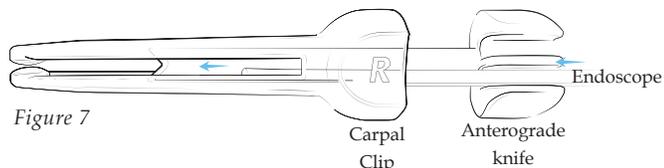


Figure 7

(Note: the Carpal Clip guide will stop the knife from sliding past the guide's end. Ensure to check that the guide is distal enough to transect the distal edge.)

Only a single pass is required with the anterograde knife.

Once transection is complete, remove the Carpal Clip guide. Irrigate and close the small incision. Place a light bandage over the closed incision. Rehabilitate based on preferred method of treatment.

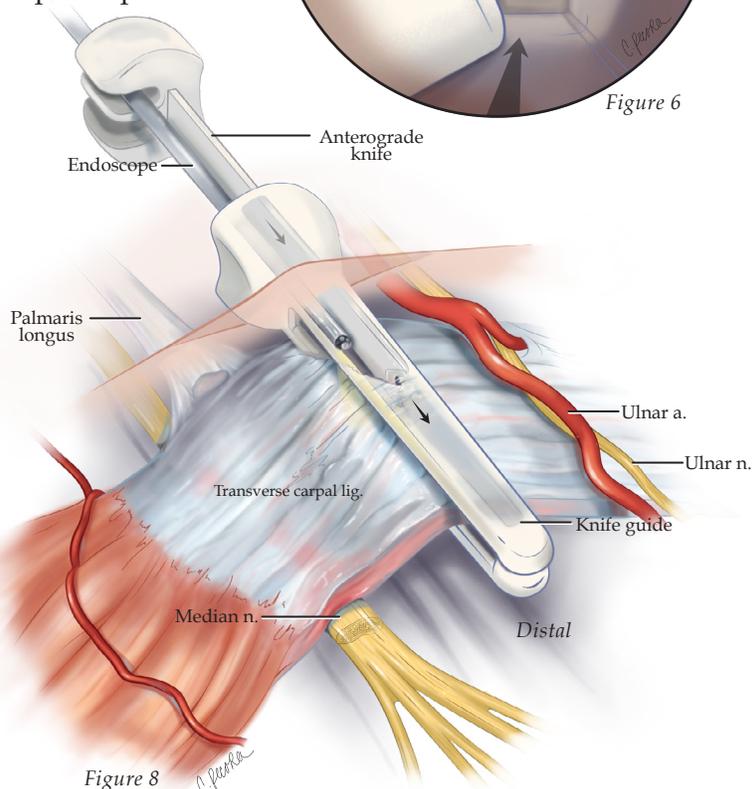


Figure 8