

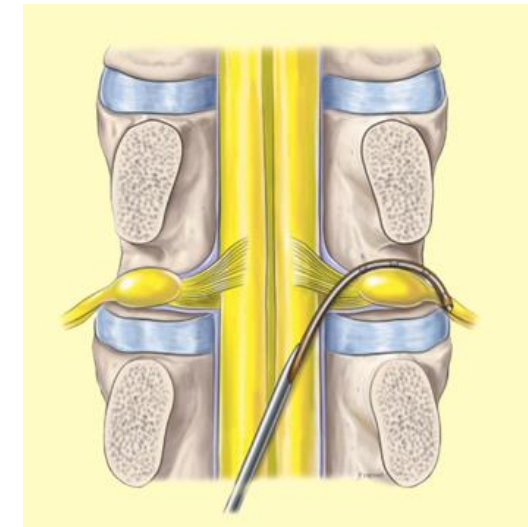
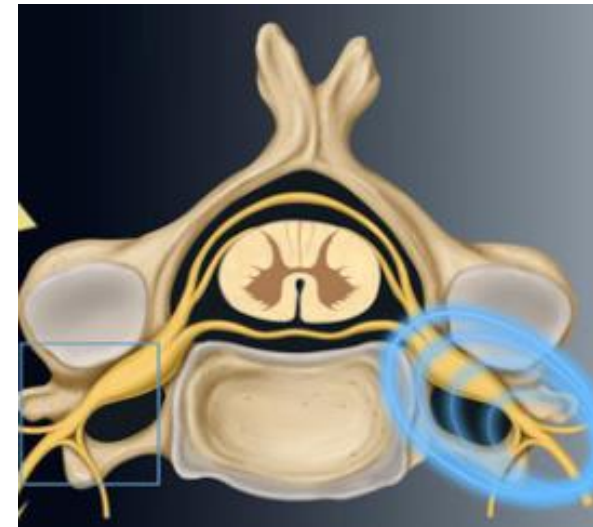
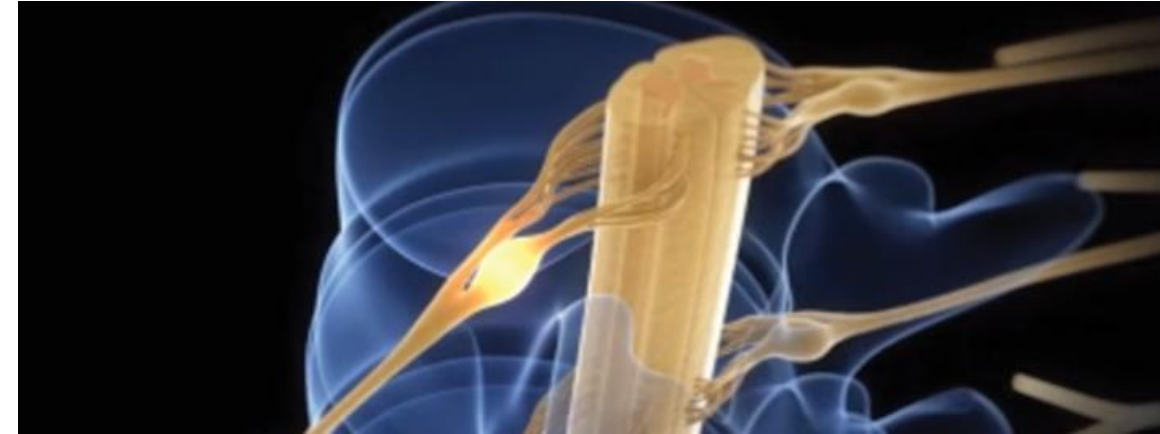
## Resaplus

RESAPLUS is a single use monopolar catheter designed and projected for:

- Mechanical adhesiolysis
- PRF application to the dorsal root ganglion
- Drug infusion in the epidural space.

### INDICATIONS:

- FBSS
- Spinal stenosis
- Chronic Low Back Pain
- Radiculopathy
- Post Herpetic Pain





## RESAPLUS sterile content includes:

- |                       |        |      |
|-----------------------|--------|------|
| • Resaplus Catheter   | 600mm  | 19 G |
| • Introduction needle | 90mm   | 17 G |
| • Syringe             | 1 cc   |      |
| • Syringe             | 2,5 cc |      |

## Equipment needed in OR:

- Fluoroscopy column
- PRF generator





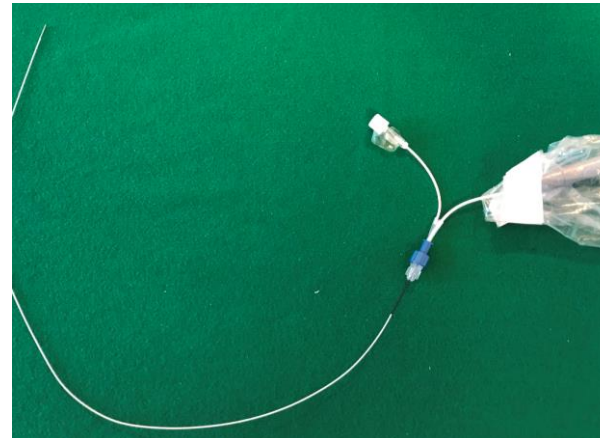
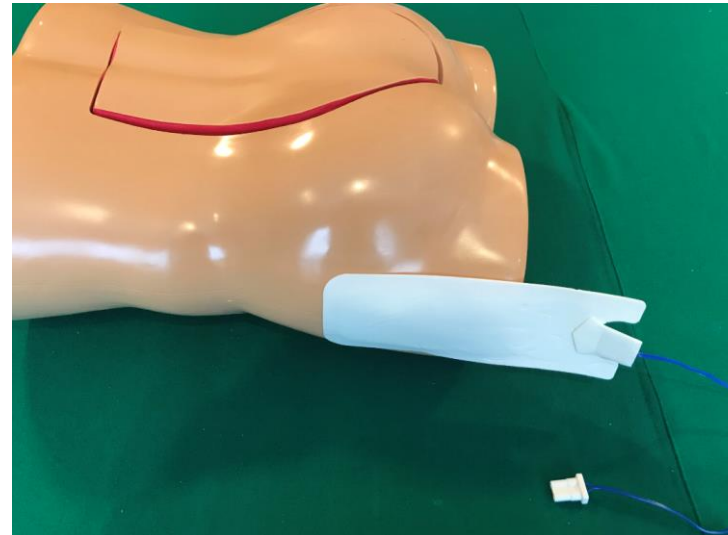
**SURGICAL TECHNIQUE:**  
**STEP 1**

Connect the ground plate\* to PRF generator and stick it on the patient leg.

\*You can use the standard ground plate compatible with your generator

Connect the Resaplus catheter to the PRF Generator\*, protecting adequately the surgical field sterility.

\*The compatible connection to your PRF generator will be granted by suitable adaptor provided by AMS.





SURGICAL TECHNIQUE:

STEP 1

example with Cosman Generator



F4828 adapter

F7805W/V  
Ground plate

Patient leg

AMS-200-CO

RESAPLUS  
Connector

Epidural space

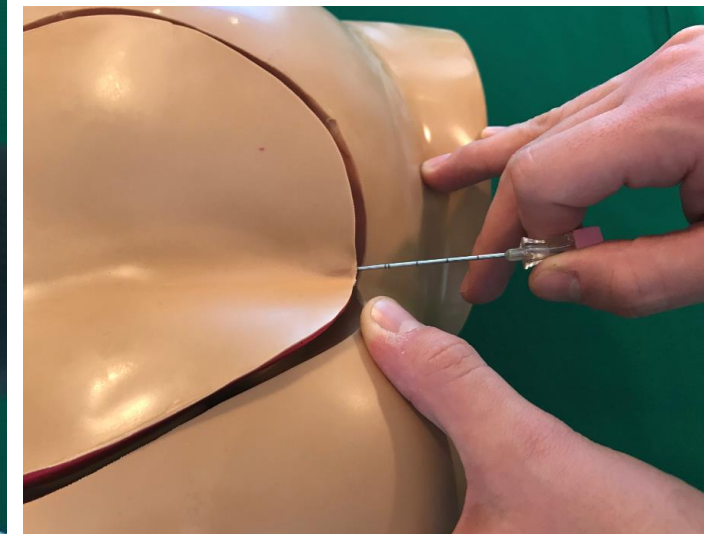
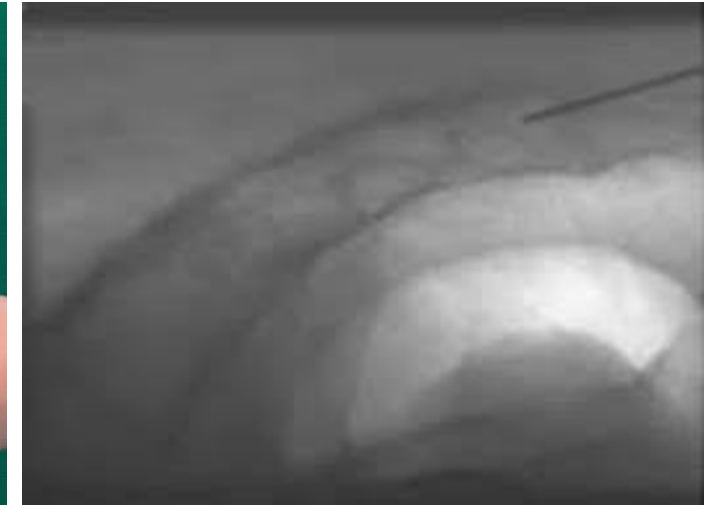
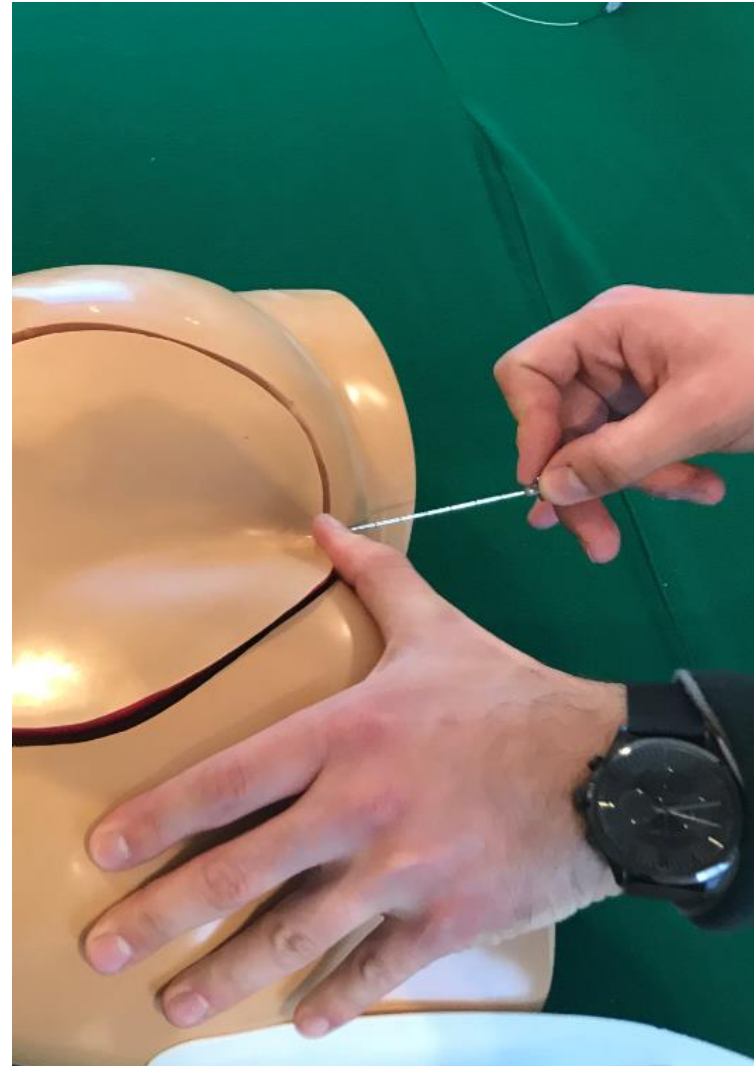


**SURGICAL TECHNIQUE:**  
**STEP 2**

Local anaesthetic will be injected in the area of the sacral hiatus.

Locate the sacral hiatus through palpation and fluoroscopy control.

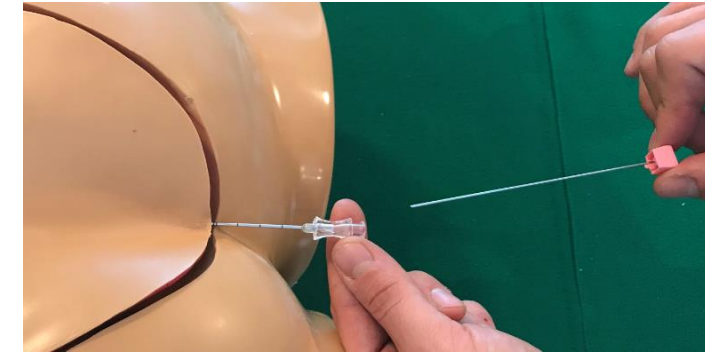
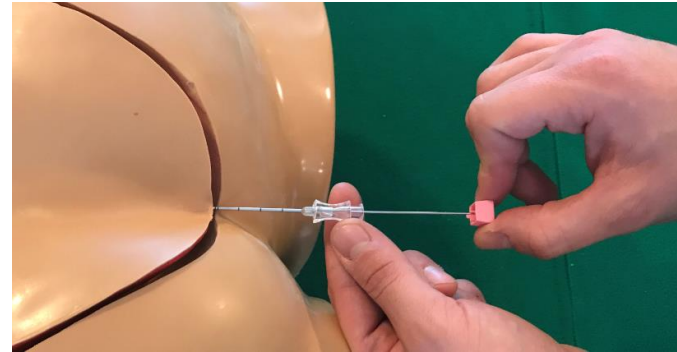
Introduce the Touhy needle through sacral hiatus entering the epidural space.





**SURGICAL TECHNIQUE:**  
**STEP 3**

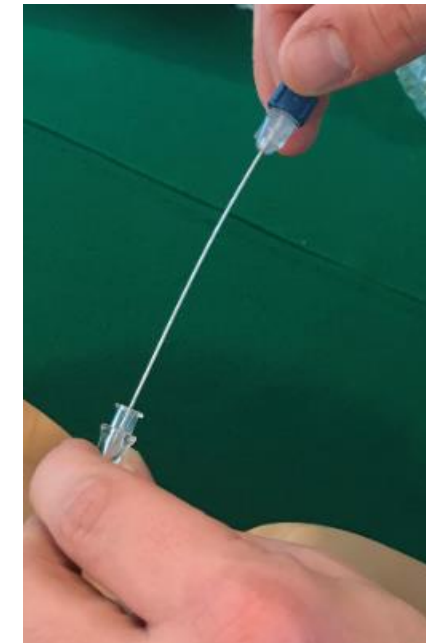
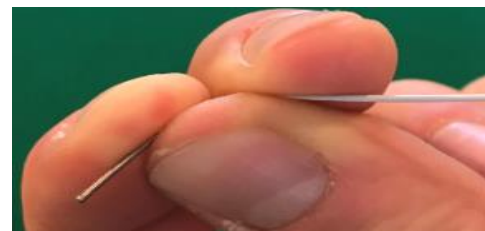
Always check correct positioning through fluoroscopy (AP and LL) and remove the stylet from the Touhy needle.



Slide the blu valve closer to the patient along the catheter and tighten the same on the catheter body, to steer it right or left.



Pre-bend the tip of the Resaplus Catheter for better orientation and easy entrance in the foramen to be treated.

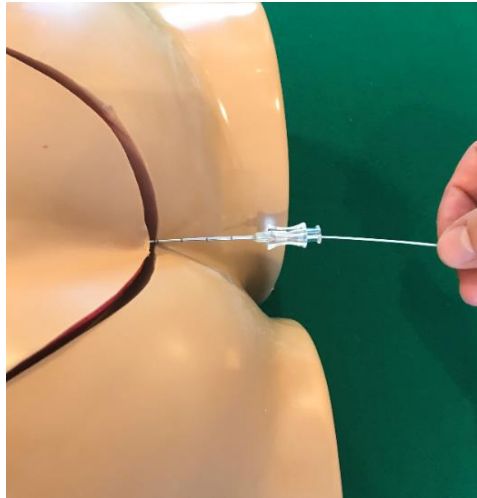






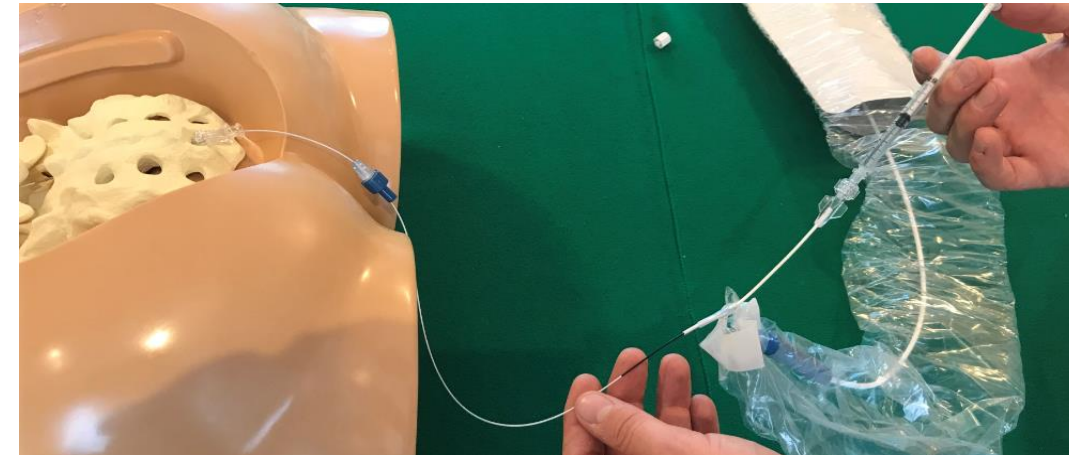
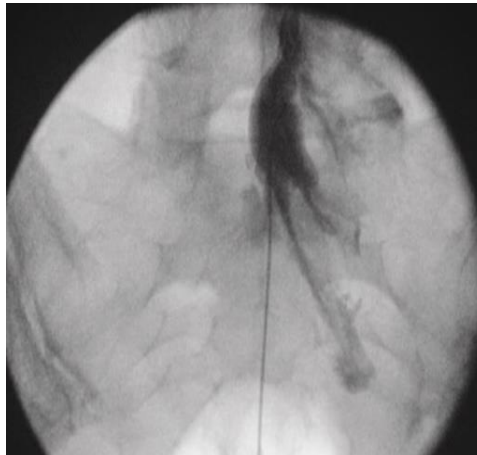
**SURGICAL TECHNIQUE:**  
**STEP 4**

Insert the Resaplus Catheter through the Tuohy needle into the epidural space



If required, or needed, infuse\* contrast liquid to visualise obstructed area in the epidural channel.

\*Syringe 1 cc suggested

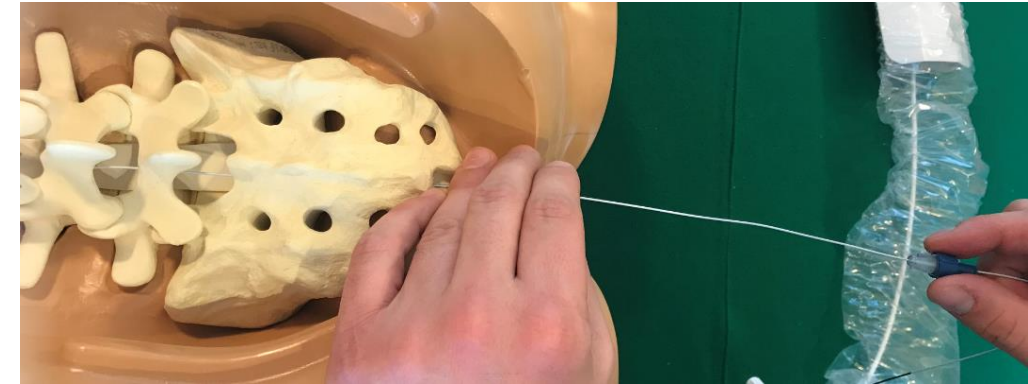
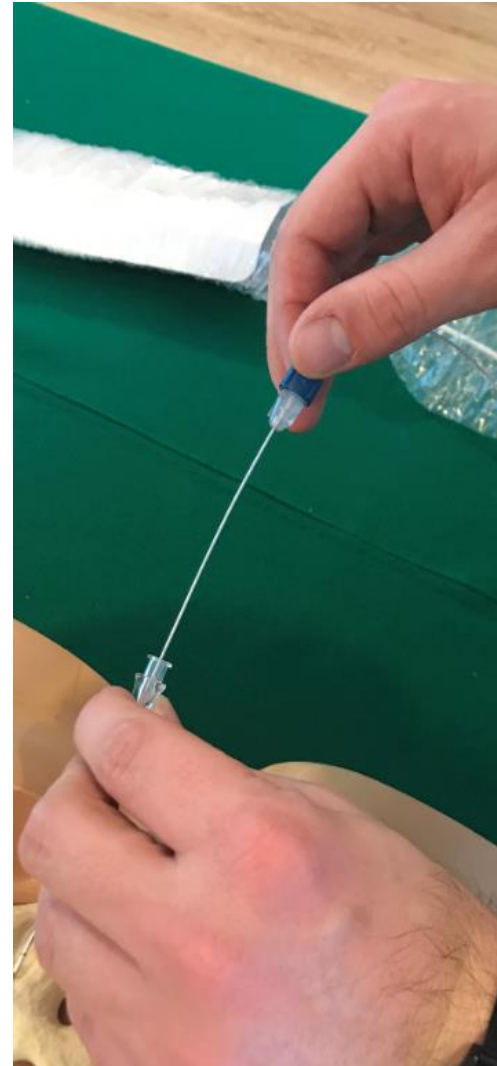




**SURGICAL TECHNIQUE:**  
**STEP 5**

Advance the catheter until the required position is reached.

While advancing, under fluoroscopy control, it is possible to perform mechanical adhesiolysis if necessary.





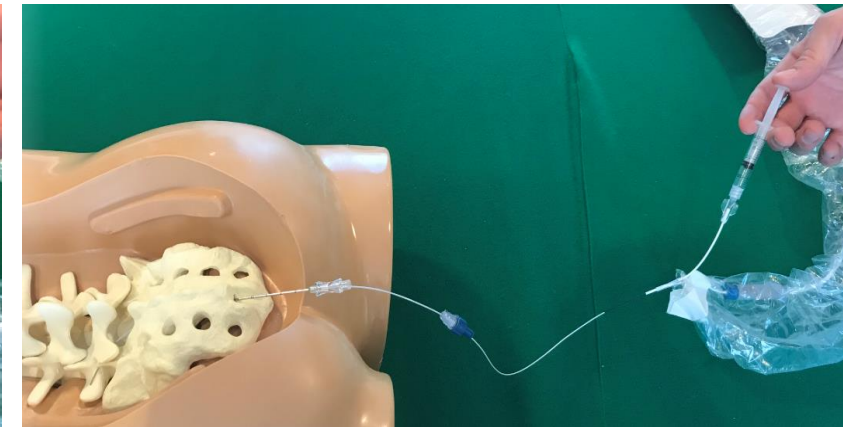
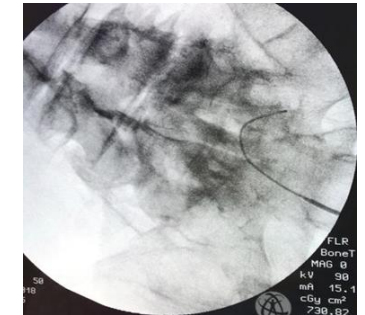


**SURGICAL TECHNIQUE:**  
**STEP 6**

Once close to the desired Ganglion perform through the generator motor and sensor stimulation to double check the correct positioning.

Set 42° 20 msec and 2 Hz on the generator.  
Start the PRF for the desired time (120/300 sec).

Infuse the drug along the catheter directly on the ganglion.



**SURGICAL TECHNIQUE:**  
**STEP 6**  
**example with Cosman generator**



**SENSORY STIMULATION**



**MOTOR STIMULATION**



**PULSED RF**

**MAX TEMP 42° C**  
**TIME treatment: 2:00 ÷ 3:00 min**  
**Set VOLTAGE: 45V ÷ 50V**  
**PULSE: 2Hz / 20msec**

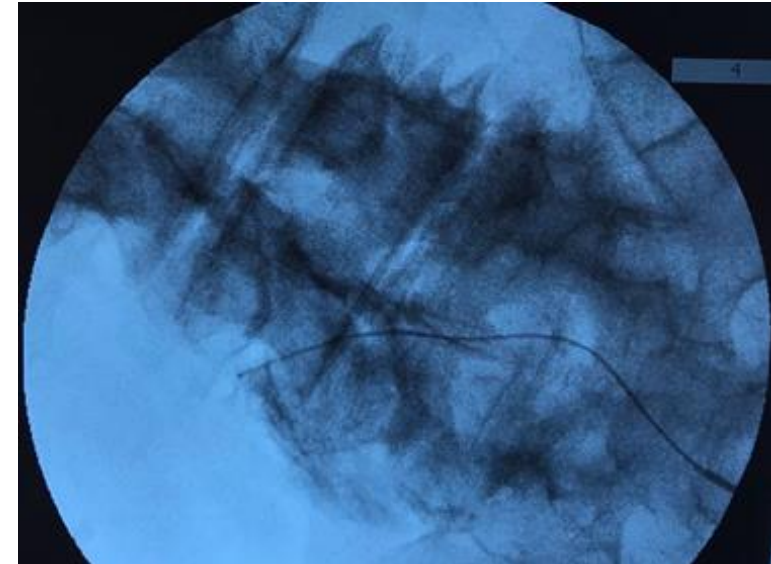
**...START PRF TREATMENT...**



**SURGICAL TECNIQUE:**  
**STEP 7 (optional)**

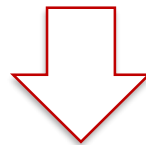
It is possible to repeat the application to other levels, left or right side, with the same catheter.

The stylet integrated in the shaft of the Resaplus makes multiple positioning much more easier. Moreover, it does not require to be removed before to perform infusions.



The procedure ends with the complete removal of the system.

or proceed with multiple infusions...





**SURGICAL TECHNIQUE:**  
**STEP 8**

Resaplus can remain “in situ” during the following 48 hours for multiple infusion therapy:

- Cut the catheter with surgical scissors along the black marker
- Unscrew and remove temporarily the blue valve and take away the Tuohy needle
- Re-position and fixate the valve at the end of the catheter for syringe luerlock connection
- Fix the catheter in place and close the valve with the luerlock cap, ready for further injections.

