

Advantage

- Low risk therapy
- Minimally invasive
- No general anesthetic
- High success rates
- No scar formation
- No open surgery
- No long hospitalization
- Quick recovery
- Repeatable at any time
- Ideal for patients who have undergone previous surgery
- Targeted treatment of causes

Features

- No need to withdraw the catheter tube to inject the medicaiton
- Medical grade stainless steel
- Flelxbile atraumatic tip design
- Kink & collapse resistant
- Radiopaque for distinct images and placement accuracy
- Non-reactive with neruolytics:Phenol, alcochol, glycerol,etc.
- Tensile spring guided catheter
- Stimulation

Typical Indications

- Chronic Back Pain
- Post-Laminectomy Syndrome
- Spinal Stenosis
- Herniated Nucleus Stenosis

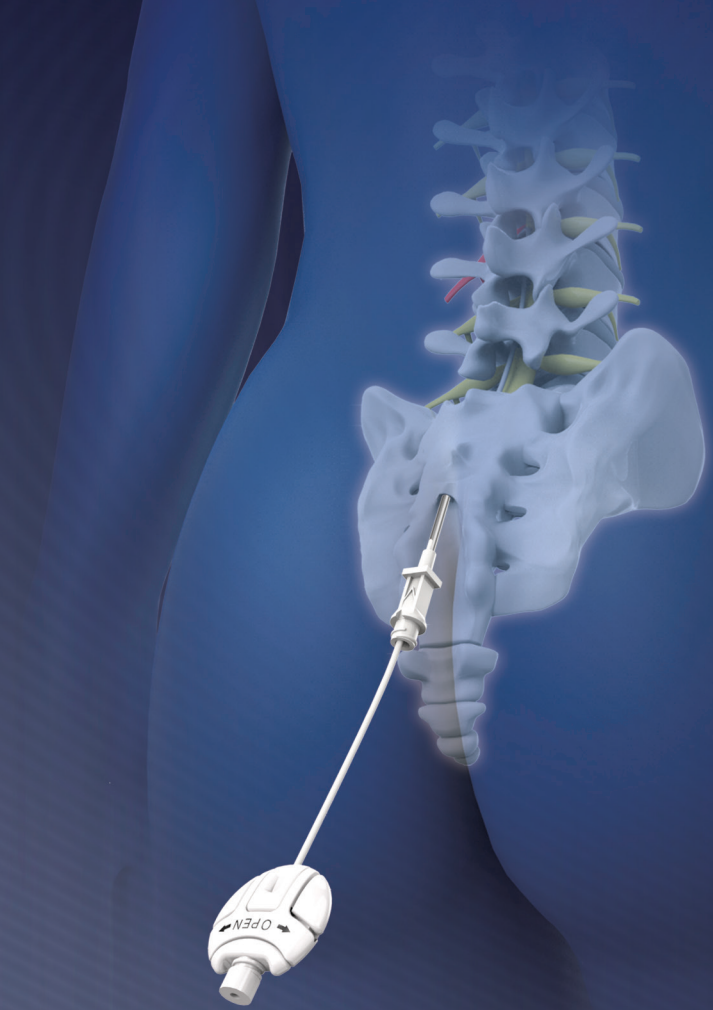
Contraindication

- Pregnancy
- Infection
- Mental illness

Ordering Information

Model information & Catheter Spec							
No.	Model Name	Sort	Catheter		Guide Wire		Needle Article Name
			Length (mm)	Tip Out Diameter (Ø)	Length (mm)	Diameter (Ø)	
1	WSC60 (WSCATH60)	Lumbar	600	1.2	630	0.3	WSVP-30A
2	WSC63 (WSCATH63)	Cervical	300	0.9	330		WSVP-30C
3	WSC65 (WSCATH65)	Cervical	500		530		
4	WSC68 (WSCATH68)	Transforaminal	340	0.8	350		WSVP-31E

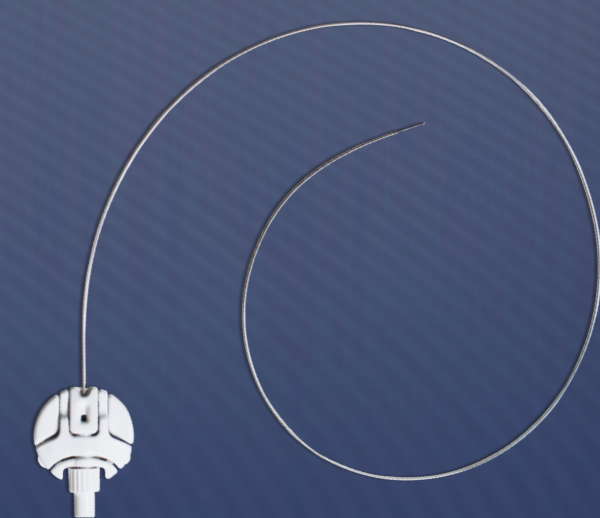
Needle Spec			
Needle Article Name	Sort	Length (mm)	Diameter (Ø)
WSVP-30A	Needle	96	1.8
	Stylet	115	1.2
WSVP-30C	Needle	94	1.3
	Stylet	112	0.8
WSVP-31E	Guide	147	1.3
	Needle#1	174	1.0
	Needle#2	174	1.0



PEN

Epidural Catheter System

“Epidural Catheter Technique”, this proven method has been used to decompress spinal nerves with-out open surgery and lastingly alleviate the pain associated with acute and chronic spine disorders. PEN is a sort of Epidural Catheter Systems for the foresaid proven method by enabling the physician to combat the pain at its source in the spine by enhancing the capability to steer to the target site.



Lumbar WSC60



Surgical Steps

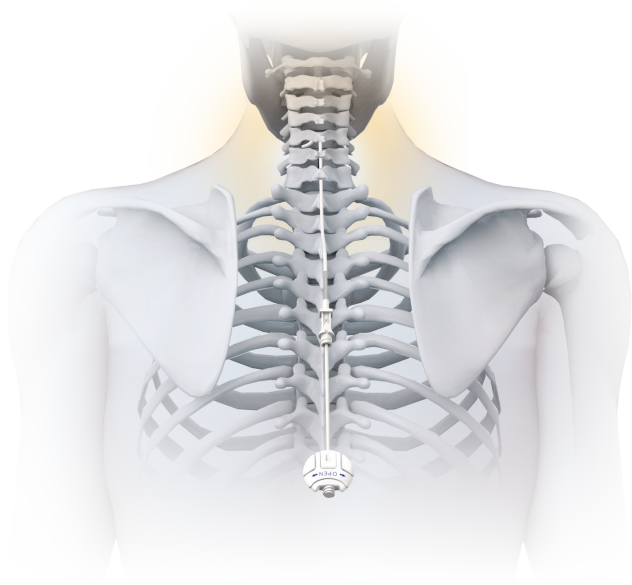
- A. Preparation for Percutaneous Epidural Neuroplasty
 - i. Prone Position: Positioning a patient on the operating table
- B. The C-arm is rotated to the lateral position to visualize the patient's hiatus.
- C. Dress and place a drape around the hiatus.
- D. Inject lidocaine to anesthetize the patient for local anesthesia inside of the hiatus.
- E. Puncture the hiatus using the Needle/Stylet.
- F. Pull the Stylet out.
- G. Leave the Needle in the hiatus.
- H. Insert the Epidural Catheter until reaching between the dura and ligamentum flavum space through the hole.
- I. Connect the Catheter body with Catheter tube
- J. Check where the catheter is with C-arm.
- K. Inject a mixed medicine into the catheter through the injection hole of the body



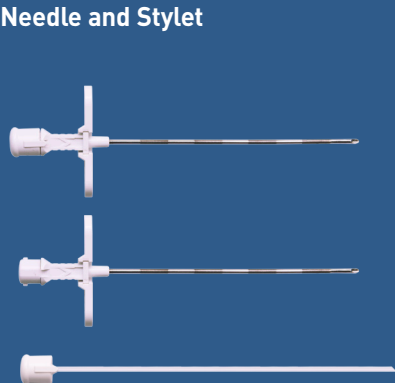
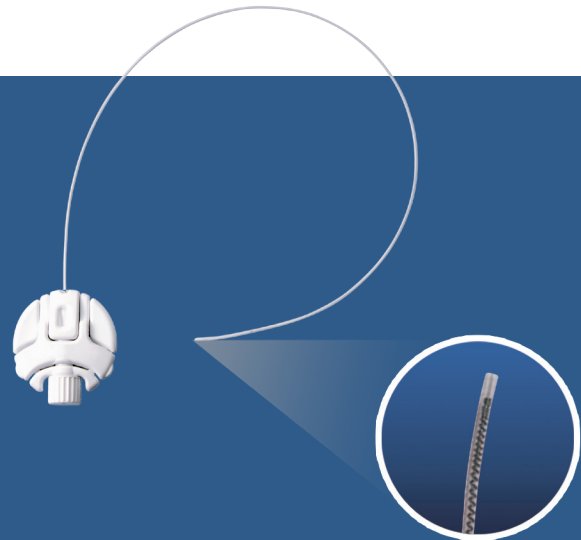
Cervical WSC63 **Cervical Long** WSC65

Surgical Steps

- A. Preparation for Percutaneous Epidural Neuroplasty.
 - i. Prone Position: Positioning a patient on the operating table.
- B. The C-arm is rotated to the lateral position to visualize the patient.
- C. Dressing and place a drape around the puncture site.
- D. Inject lidocaine to anesthetize the patient for local anesthesia.
- E. Puncture the site using the Needle/Stylet.
- F. Pull the Stylet out.
- G. Leave the Needle.
- H. Insert the Epidural Catheter until reaching the space through the hole.
- I. Check where the catheter is with C-arm.
- J. Inject mixing medicine into the catheter through the injection hole of the body.
- K. Once the procedure is completed, the catheter and needle are removed together



PEN is an infusion device for Percutaneous Epidural Neuroplasty.



Trans foraminal WSC68

Surgical Steps

- A. Preparation for Percutaneous Epidural Neuroplasty.
 - i. Prone Position: Positioning a patient on the operating table.
- B. The C-arm is rotated to the lateral position to visualize the patient.
- C. Dressing and place a drape around the puncture site.
- D. Inject lidocaine to anesthetize the patient for local anesthesia.
- E. Puncture the site using the Needle/Stylet.
- F. Pull the Stylet out.
- G. Leave the Needle.
- H. Insert the Epidural Catheter until reaching the space through the hole.
- I. Check where the catheter is with C-arm.
- J. Inject mixing medicine into the catheter through the injection hole of the body.
- K. Once the procedure is completed, the catheter and needle are removed together

