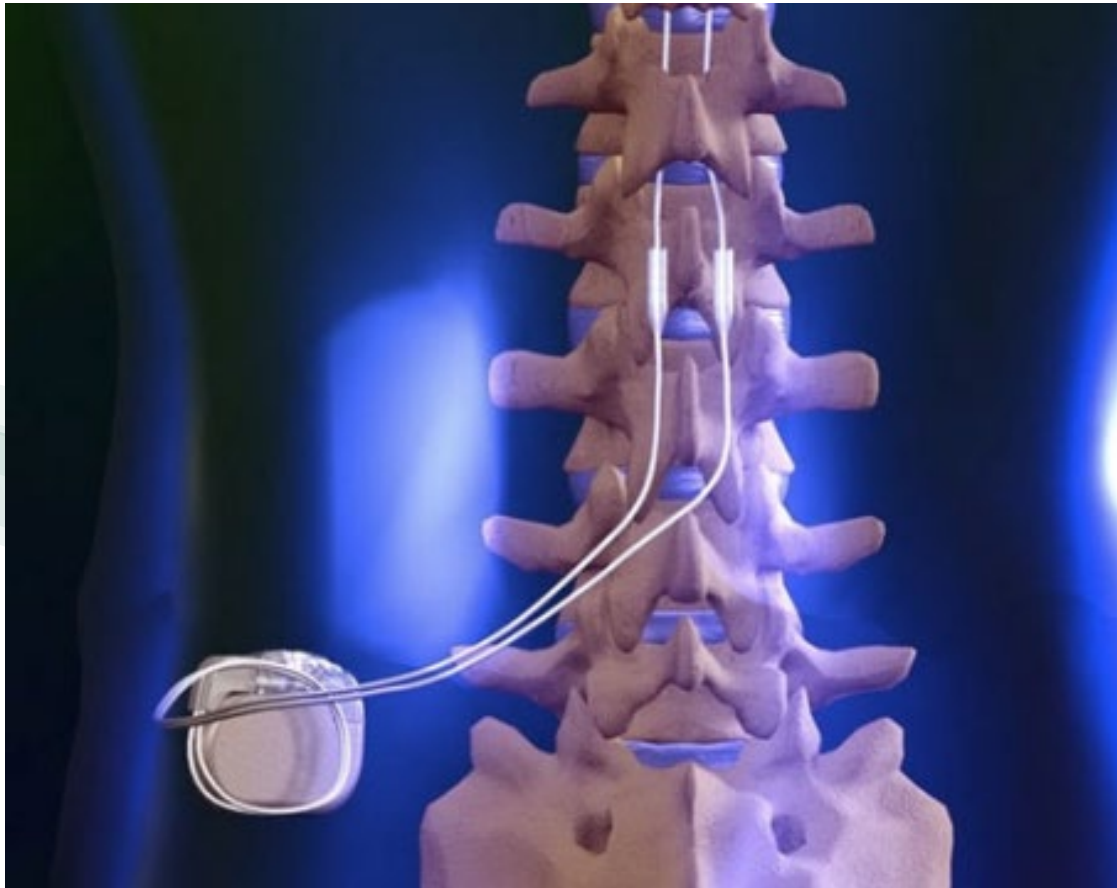


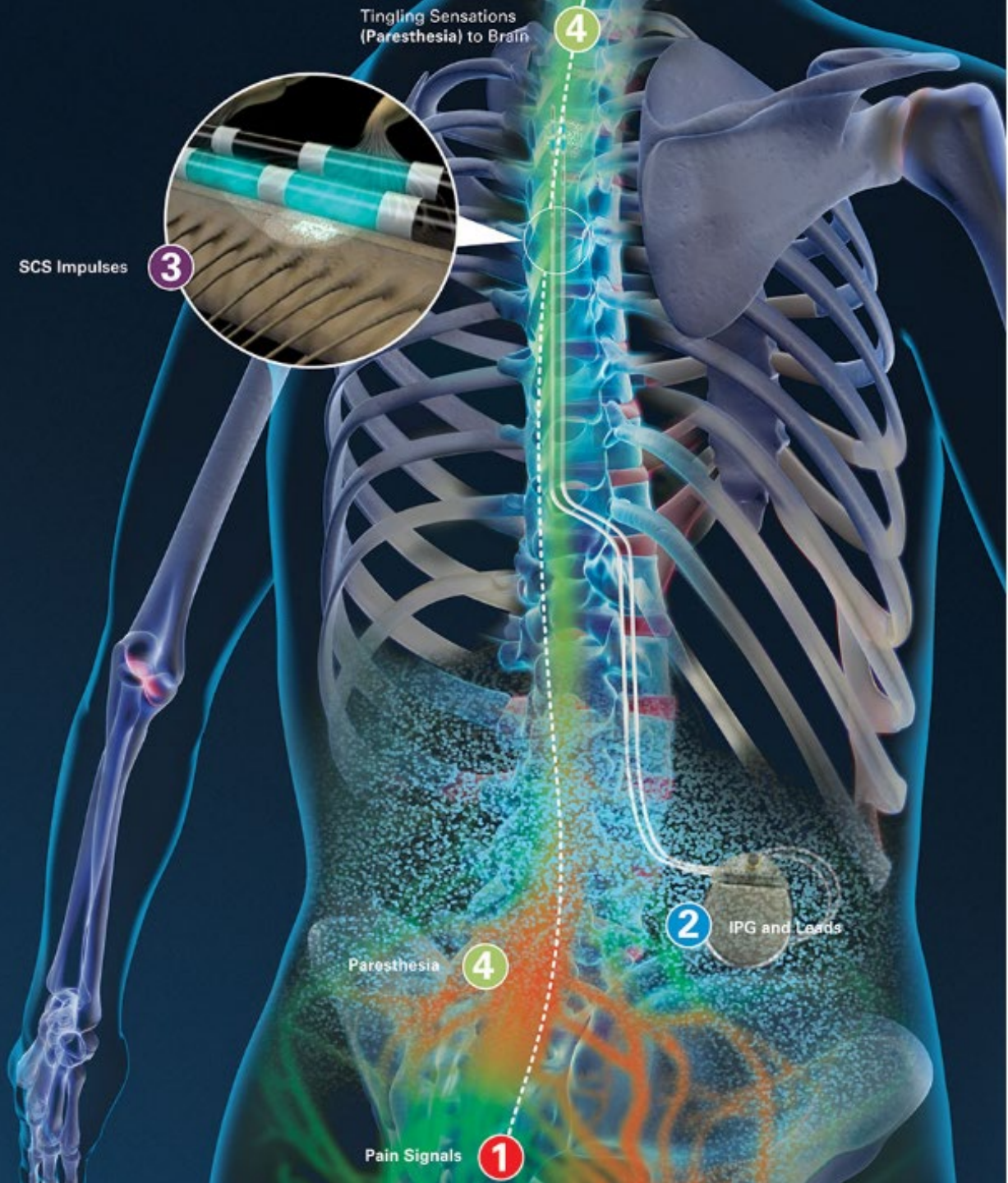


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SPINAL CORD STIMULATOR

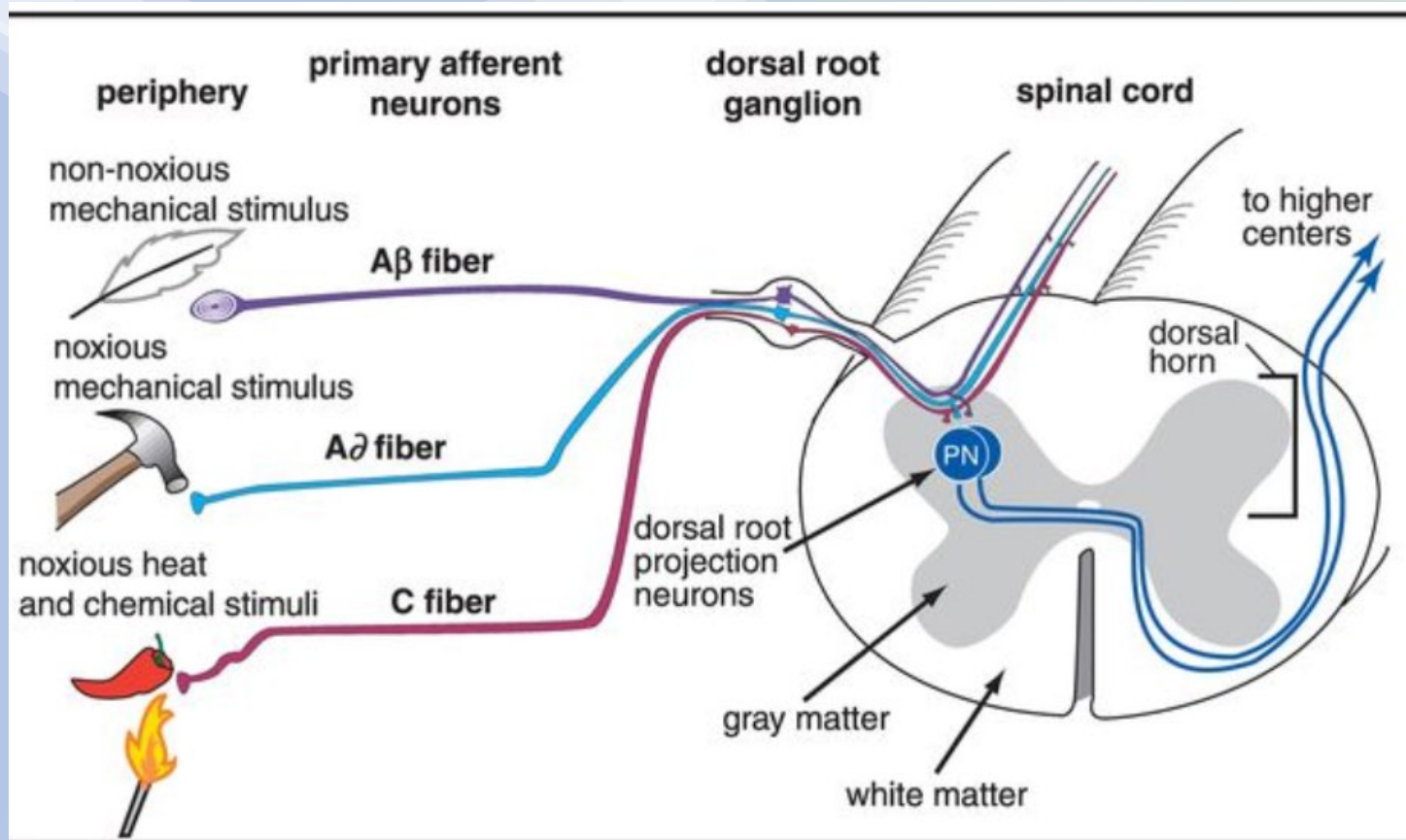
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Center for Wellness and Pain Care
Las Vegas, NV
September 8, 2023



SPINAL CORD STIMULATOR

What is it
Indications
Contra-indications
Trial
Implantation

Introduction

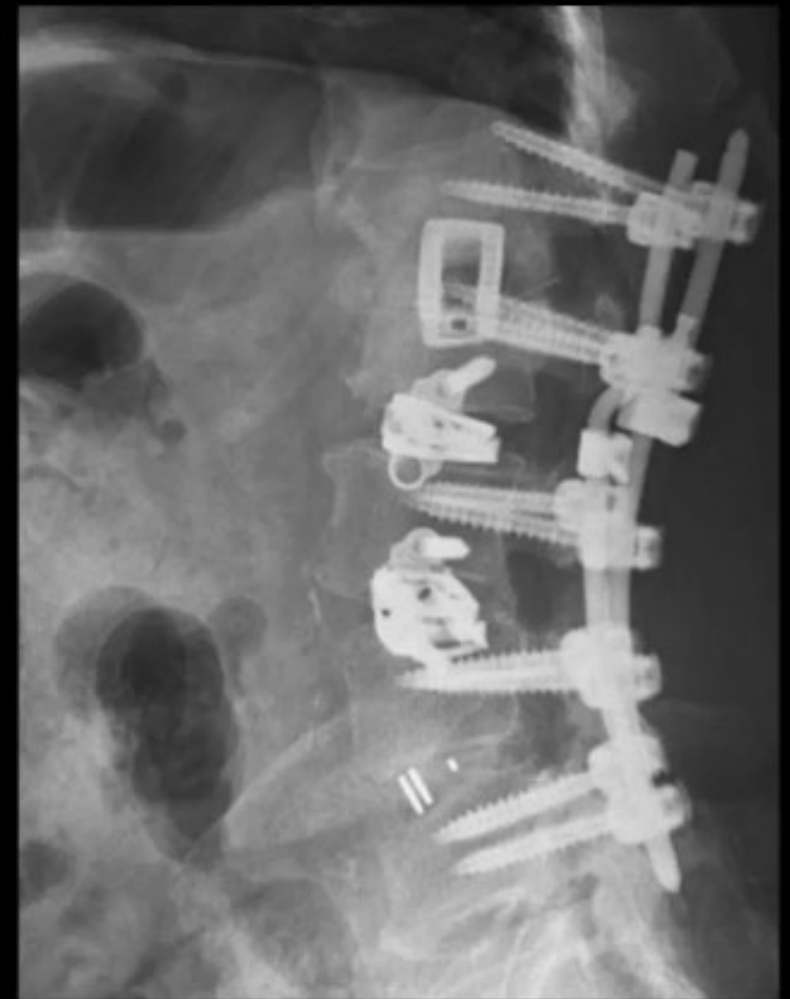
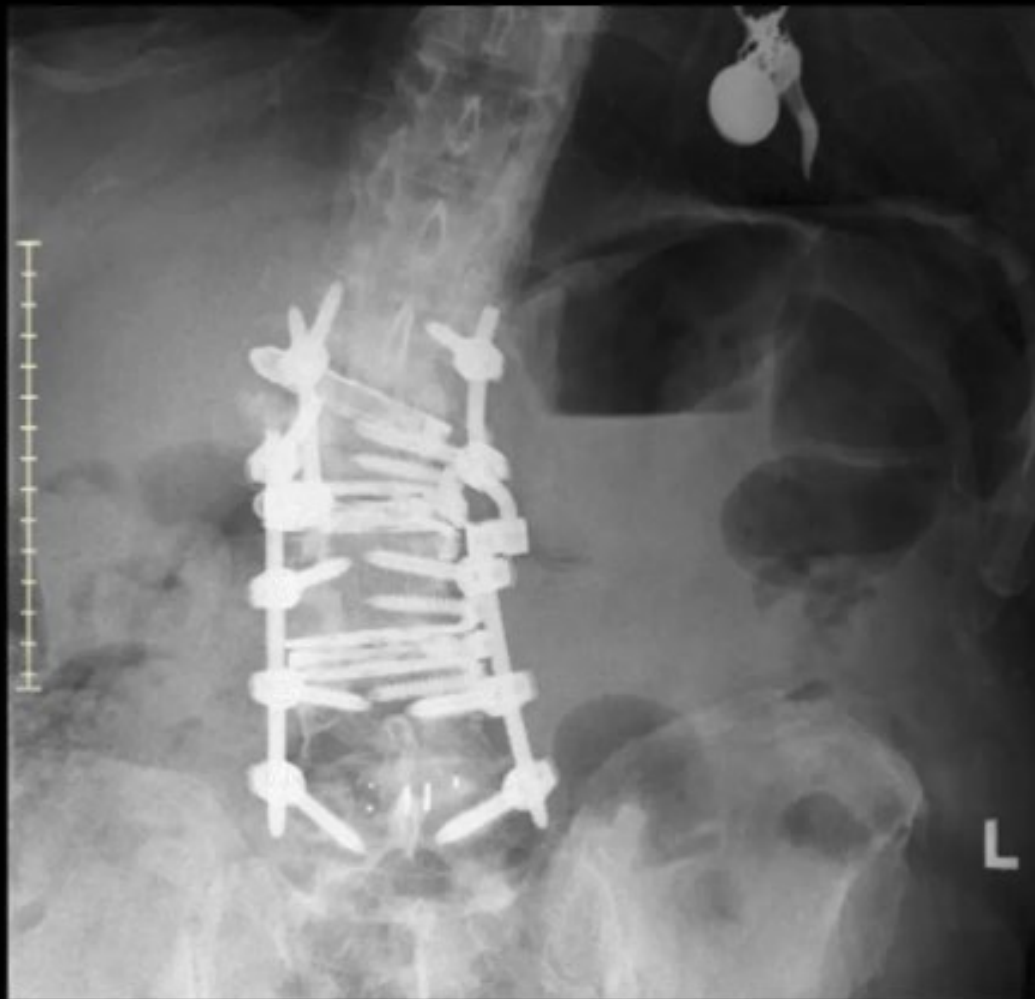


- The first spinal cord stimulator lead placement was intrathecal in 1967.
- The exact mechanism is unknown:
 - Suppression of central excitatory pain
 - Gate theory
 - A delta and C fibers
 - The gate is overwhelmed with nonpainful stimuli, leads to failure of transmission from A delta and C fibers
- suppresses neurons within the dorsal horn of the spinal cord
- 30,000 SCS are implanted yearly

Indications

- Failed back syndrome (post-laminectomy syndrome) #1 reason
- CRPS
- Diabetic peripheral neuropathy
- Arachnoiditis
- Post-amputation pain, limb pain, phantom
- Others

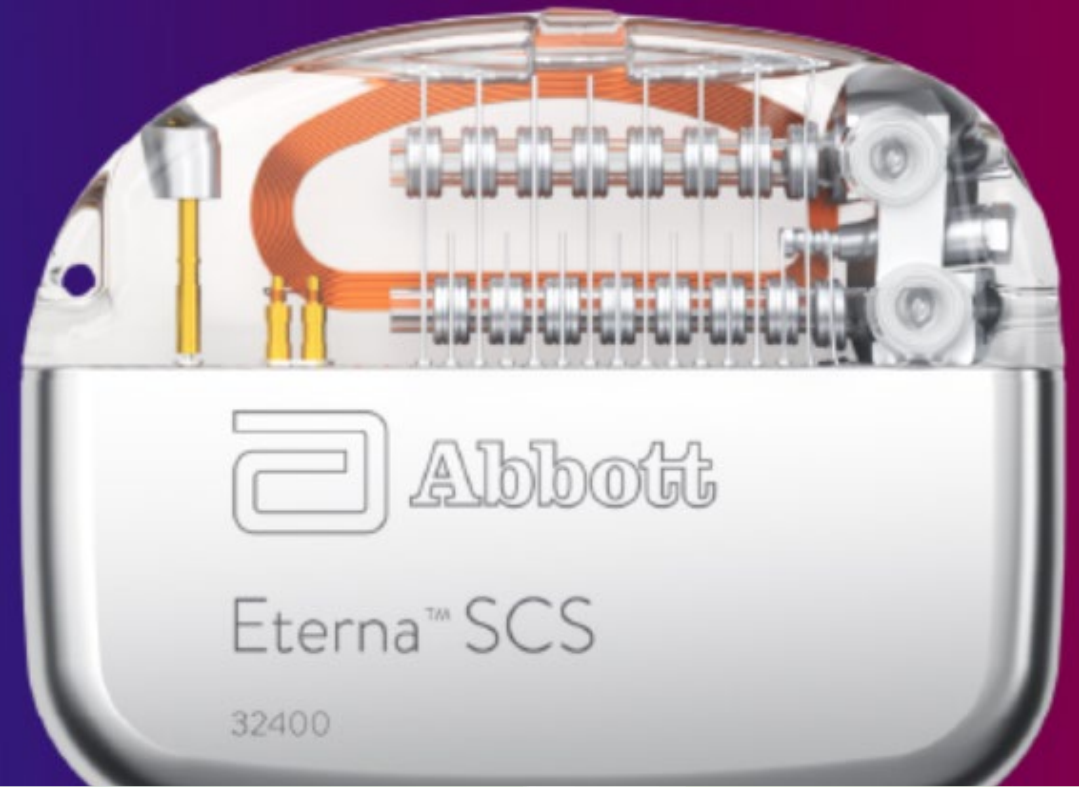
Failed Back Surgery Syndrome (FBSS)



4 components spinal cord stimulator

1. Leads (usually 2)
2. Extension
3. IPG (implantable programmable generator)
4. Handheld device =iPhone, iPad.

Electrodes and IPG





Contraindications for SCS

- Failed psychiatric evaluation
- Systemic infection or local infection
- Anticoagulation (unable to stop)
- Coagulopathies
- Cognitive concerns
- Medically not cleared for surgical implantation
- pacemaker or defibrillator remains a relative contraindication to the implant.

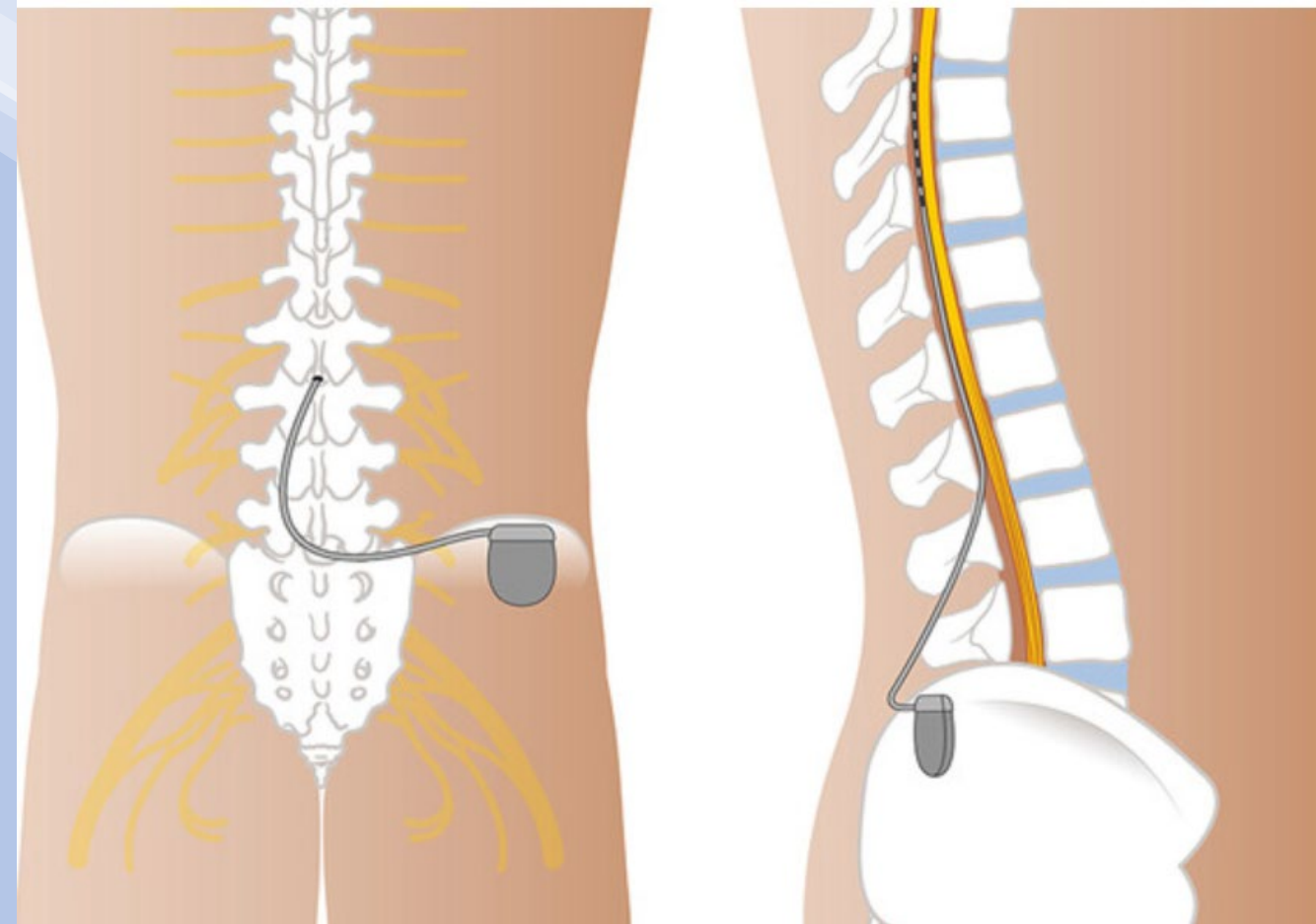


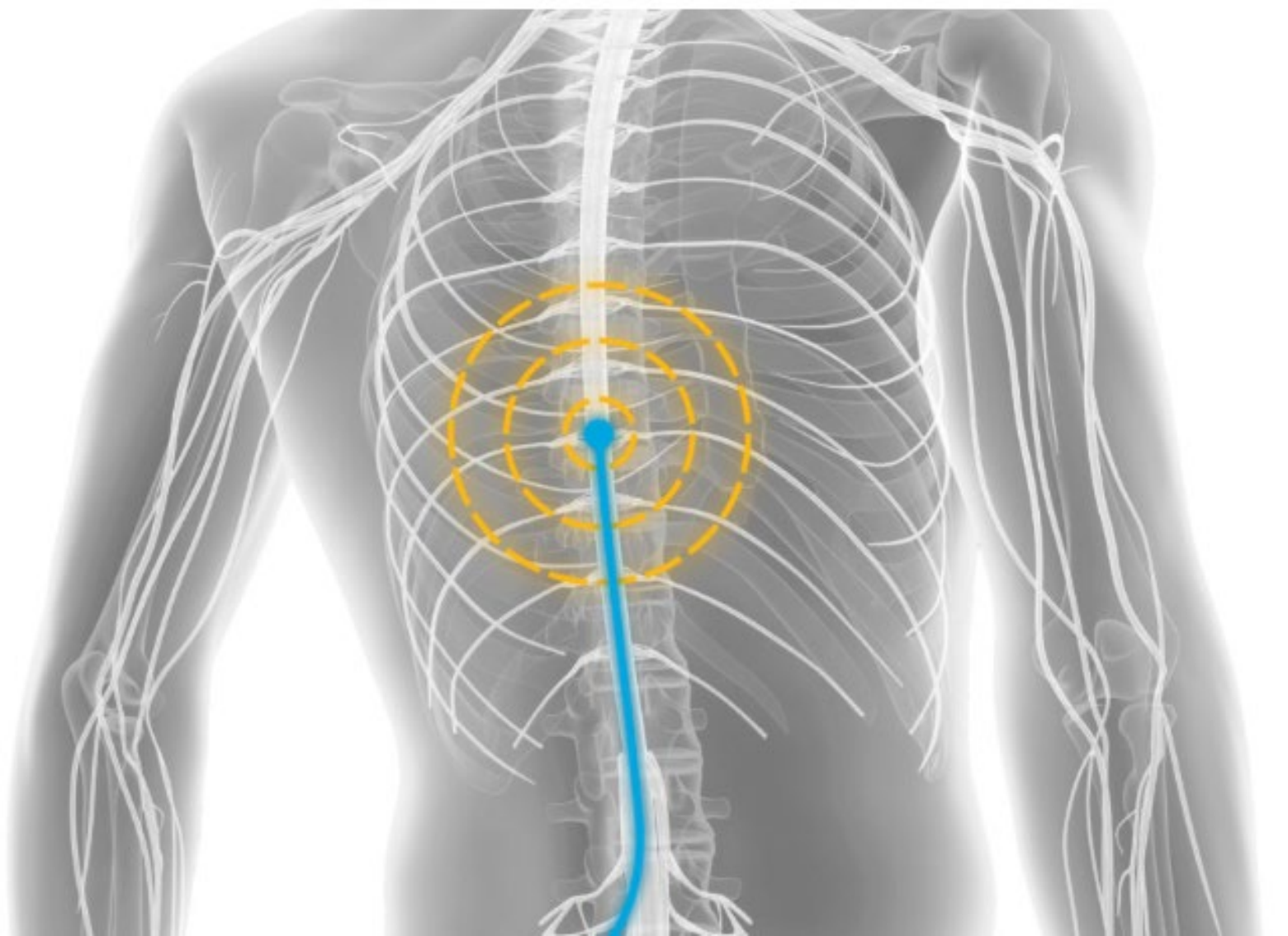
Trial

- Leads are percutaneous placed at the surgery center
- No incision
- Electrodes taped to lower back
- Operate unit with remote control
- Leads removed in-office 5-6 days
- If obtain pain reduction $>50\%$ may proceed to implantation.
 - 2 weeks later

Implantation

- 2 small incisions
- 1-2 hrs procedure in ASC
- Go home same day
- Highly effective treatment option
- Use less opioids after implant
- Newer units are MRI compatible (place an MRI mode by rep, older models check with rep)
- Staples or sutures removed in 10-14 days





SCS Summary

- Minimally invasive surgical procedure
- Can provide great relief to patients when there are no other options
- Help decrease medication use, increased function, improvement in quality of life.
- Trial before implantation.
- “Try it before you buy it”



Thank you