1. Disc Nerve Supply
- Normal disc: innervations limited to outermost 2-3 mm
- Painful disc: inflammation, neovascularization, & nerve irritation

2. Epiduroscope
- 3.4 mm Scope outer diameter
- 1.85 mm Working channel
- 160 mm Working length
- Straight (rigid) vs Curved (flexible)

3. Laser
- Fiber optic laser delivery system
  - Pulsed Nd:YAG
  - Intermediate infrared laser, 1,414 nm wave length (Green Visible Laser Diode)
  - 0.4 mm tissue penetration
  - Gasification, ablation, dissection, coagulation, hemostasis
  - 12 W output power
  - Stimulation: 50-150 mJ/ 1-10 Hz (Max 600 mJ pulse energy)
    - Treatment: 150-600 mJ/ 5-20 Hz (1-20 Hz frequency)
  - Forward vs. Side firing

4. Indication
- Discogenic LBP w/wo leg pain
- HNP

5. Contraindication
- Hard & calcified HNP
- Severe stenosis
- Instability

6. Procedure
1) Skin entry point: 10-12 cm lateral from midline, 20-30 degree from horizon
2) Spinal needle & guide wire insertion to Kambin’s triangle  
3) Dilator insertion & Epidurography  
4) NeedleViewCH insertion  
5) Annular probing or Discography  
6) Laser Annuloplasty  

7. Mechanism of Action  
- Direct neural decompression of HNP with lasering or forceps  
- Gradual absorption of HNP  
- Destruction of ingrown nerve  
- Irrigation of chemical agents  

8. Complication  
- Bleeding  
- Dural or neural injury  
- Annular damage  
- Headache, IICP  

9. Summary  
- Similar technique of PELD  
- Minimal invasive  
- No steroid  
- Bridge to Operation