

Lumbar Puncture

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Indication

- Spinal And Epidural Anesthesia
- Infectious(meningitis , Encephalitis , Myelitis)
- Inflammatory(Multiple Sclerosis, Guillain-Barre)
- Oncologic-Leukemia
- Metabolic Disease
- Intrathecal Administration of AB ,
Chemotherapeutic agents, ...
- Diagnostic(and some Therapeutic) CSF removal
in NPH

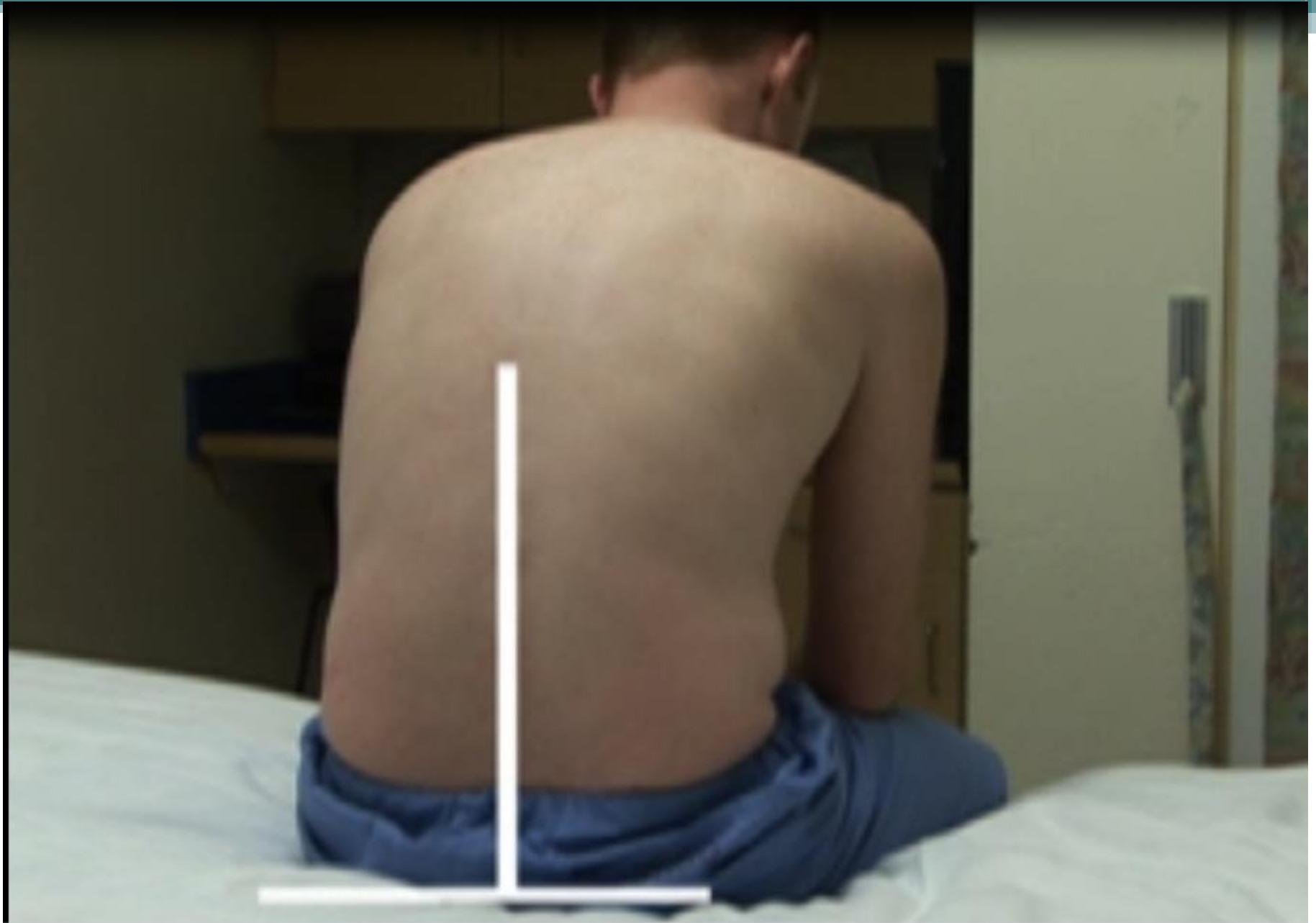
Contraindication

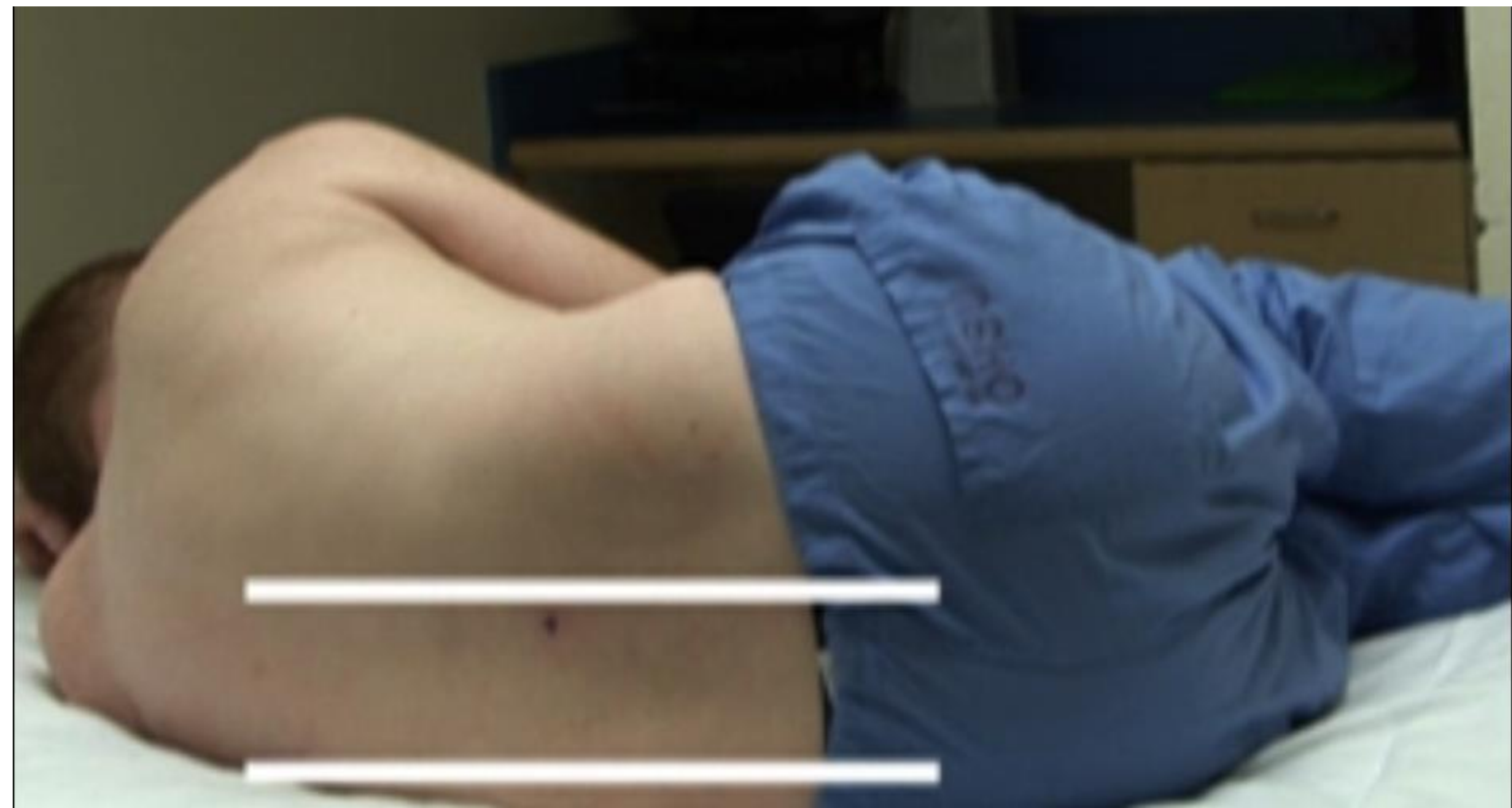
- Cardiorespiratory Compromise
- Signs of Cerebral Herniation
- Focal Neurological Signs
- Bleeding Diathesis
- Previous Lumbar Surgery

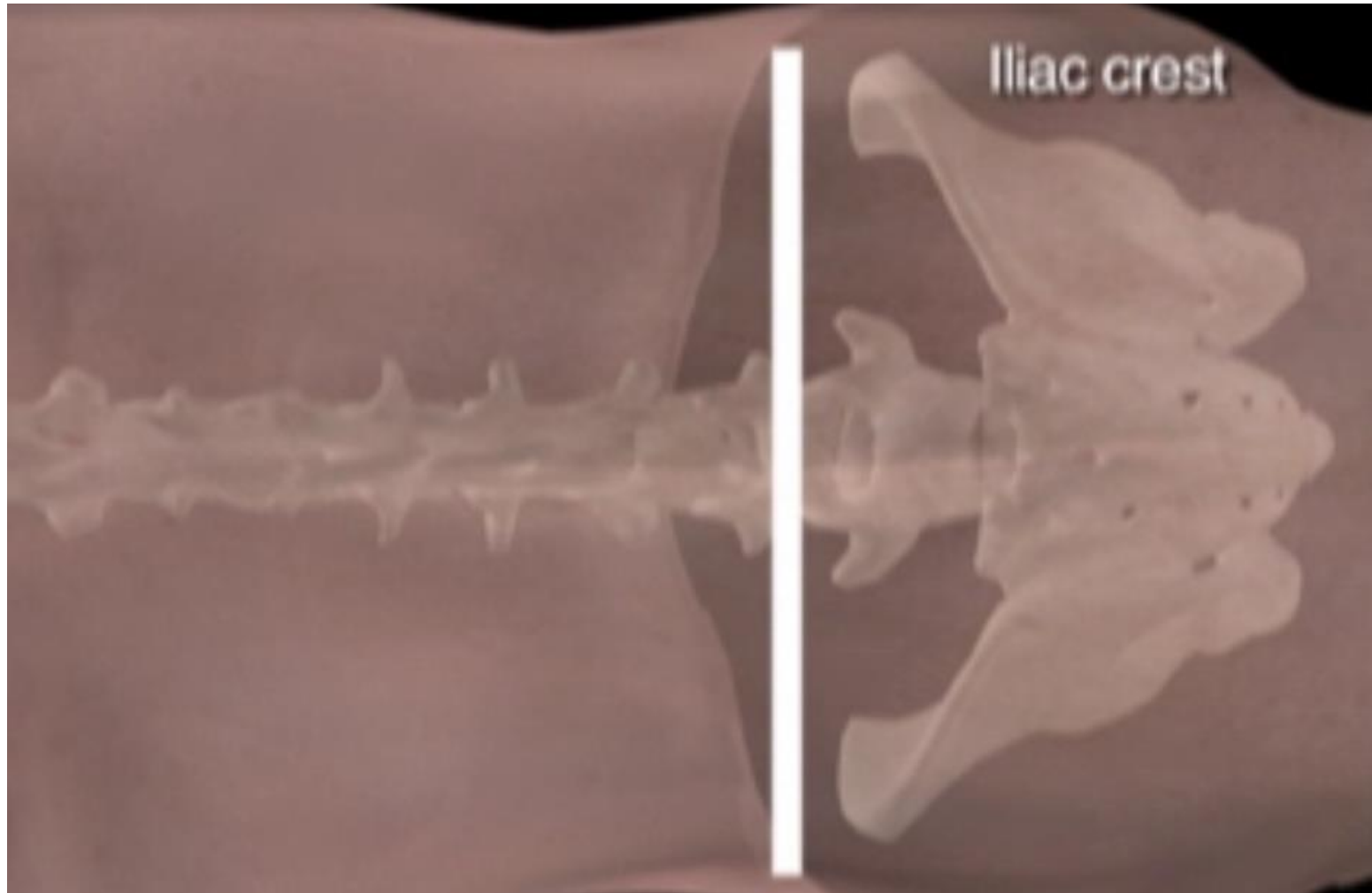
Equipment

- Stylet Spinal Needle(20-22 gauge)
- Skin Prep & Drape
- Collection Tubes
- Manometer
- Sterile Gloves

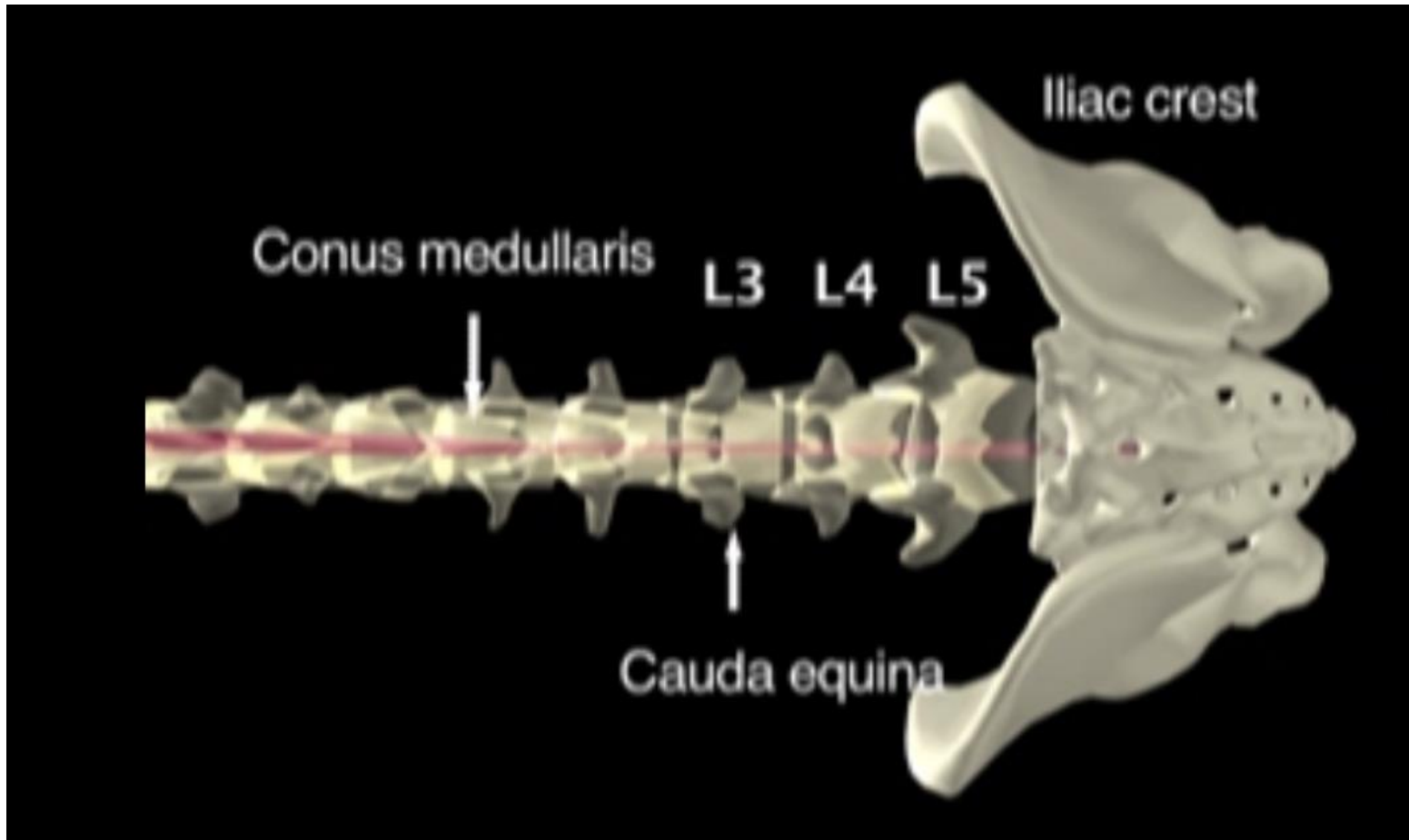








iliac crest



Lo



Pren



Drape

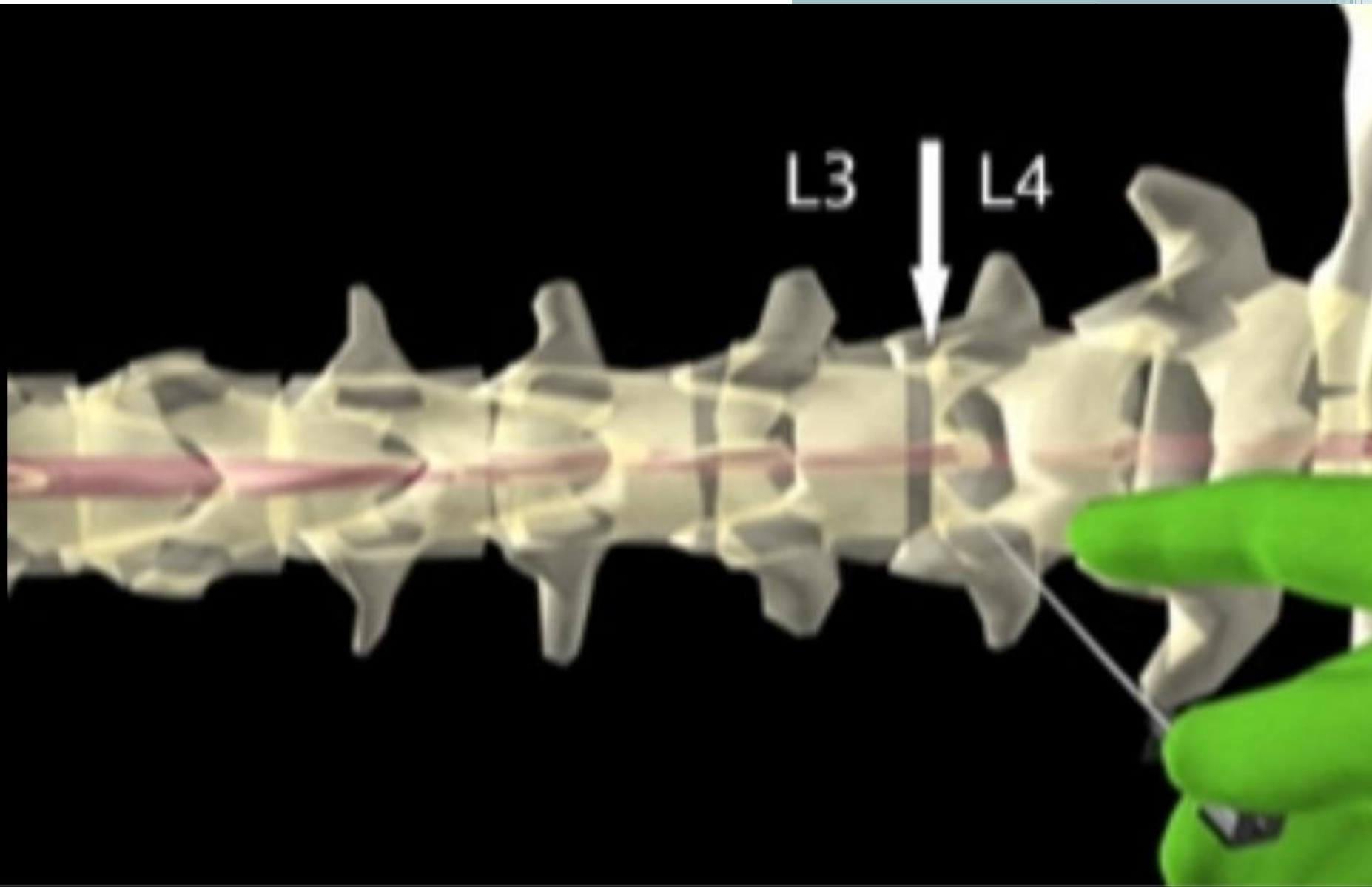


Loc

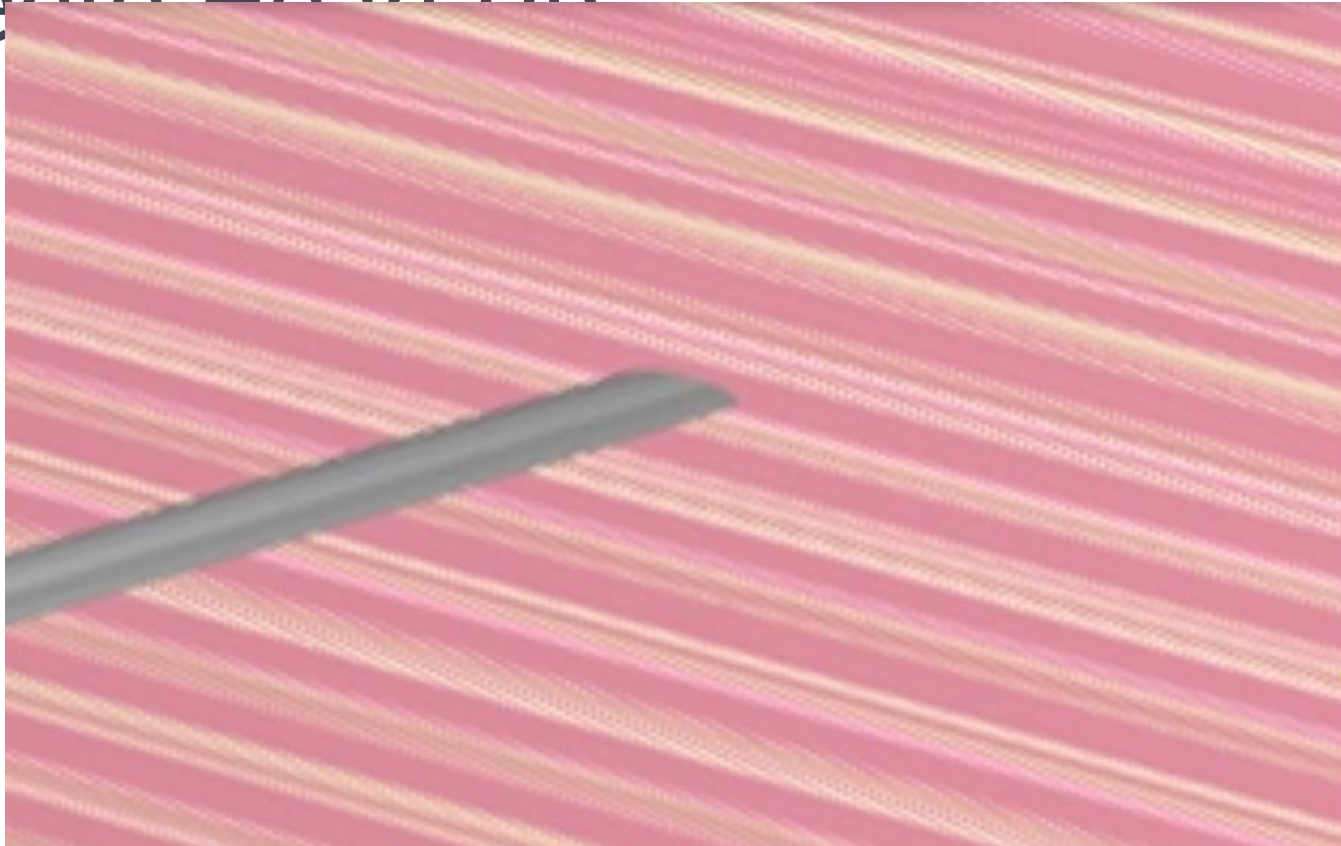


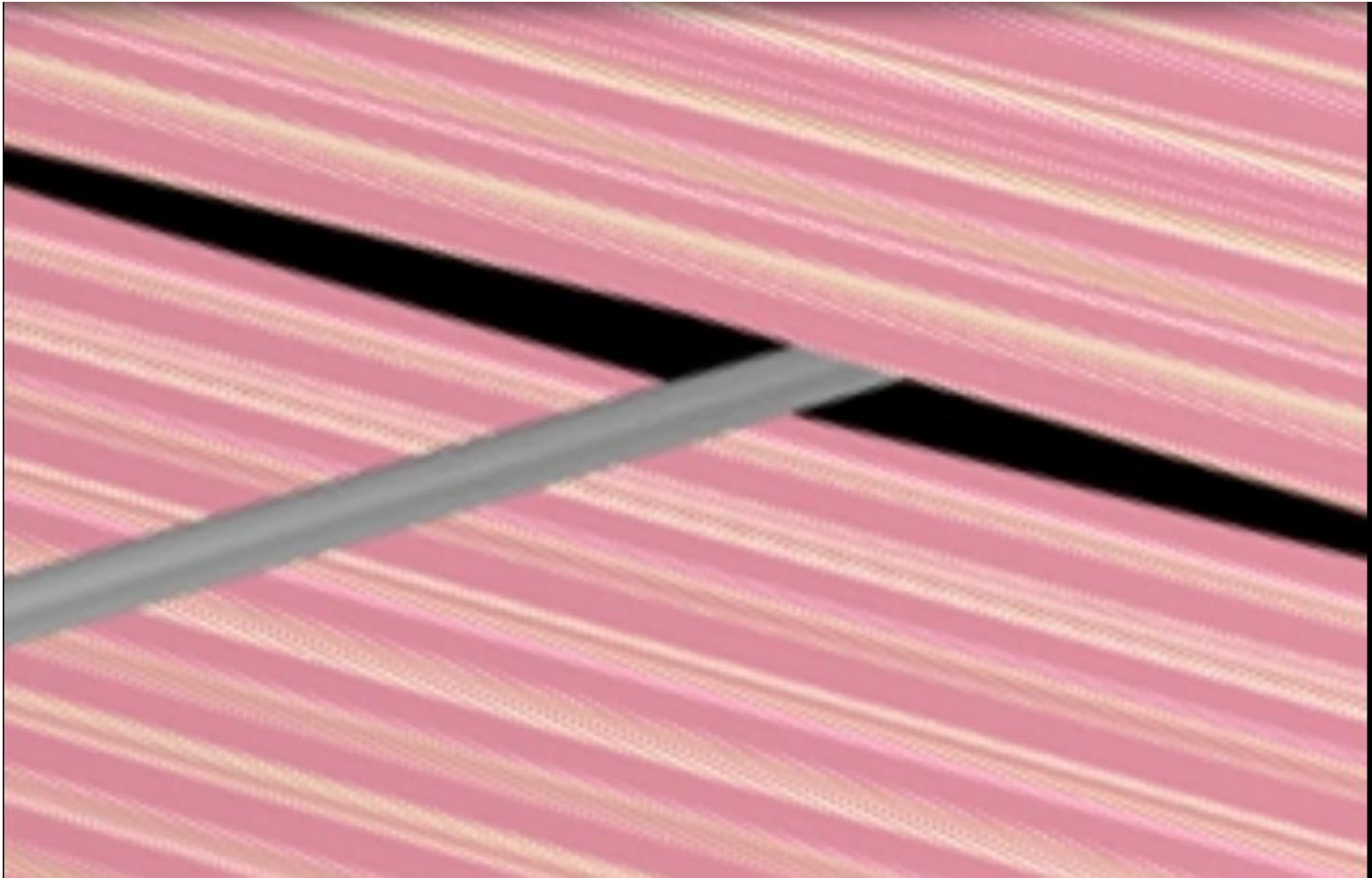
Midline 15 Degree



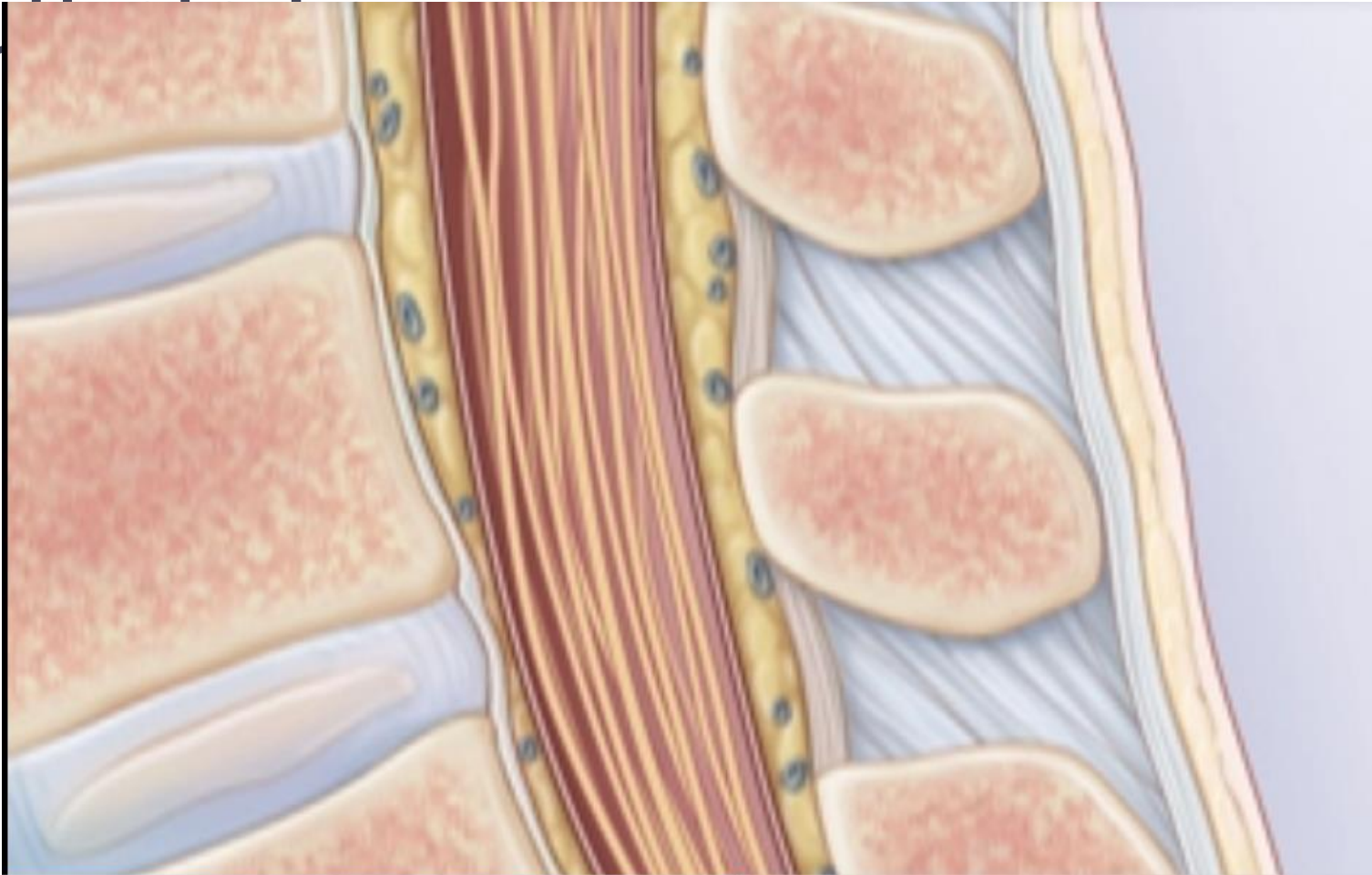


Needle Head Up

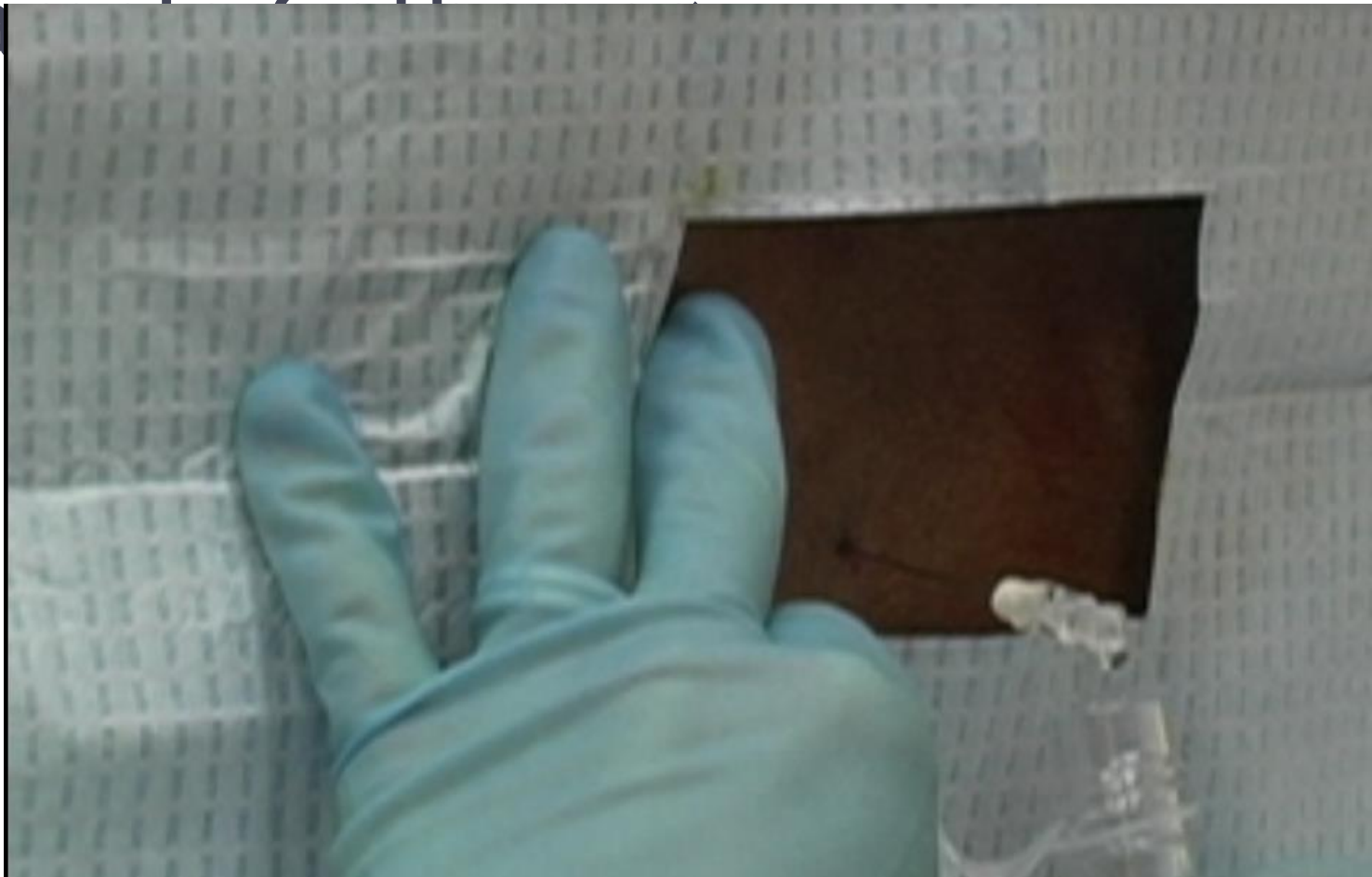




Multifidus



Sample Collection



M



Re



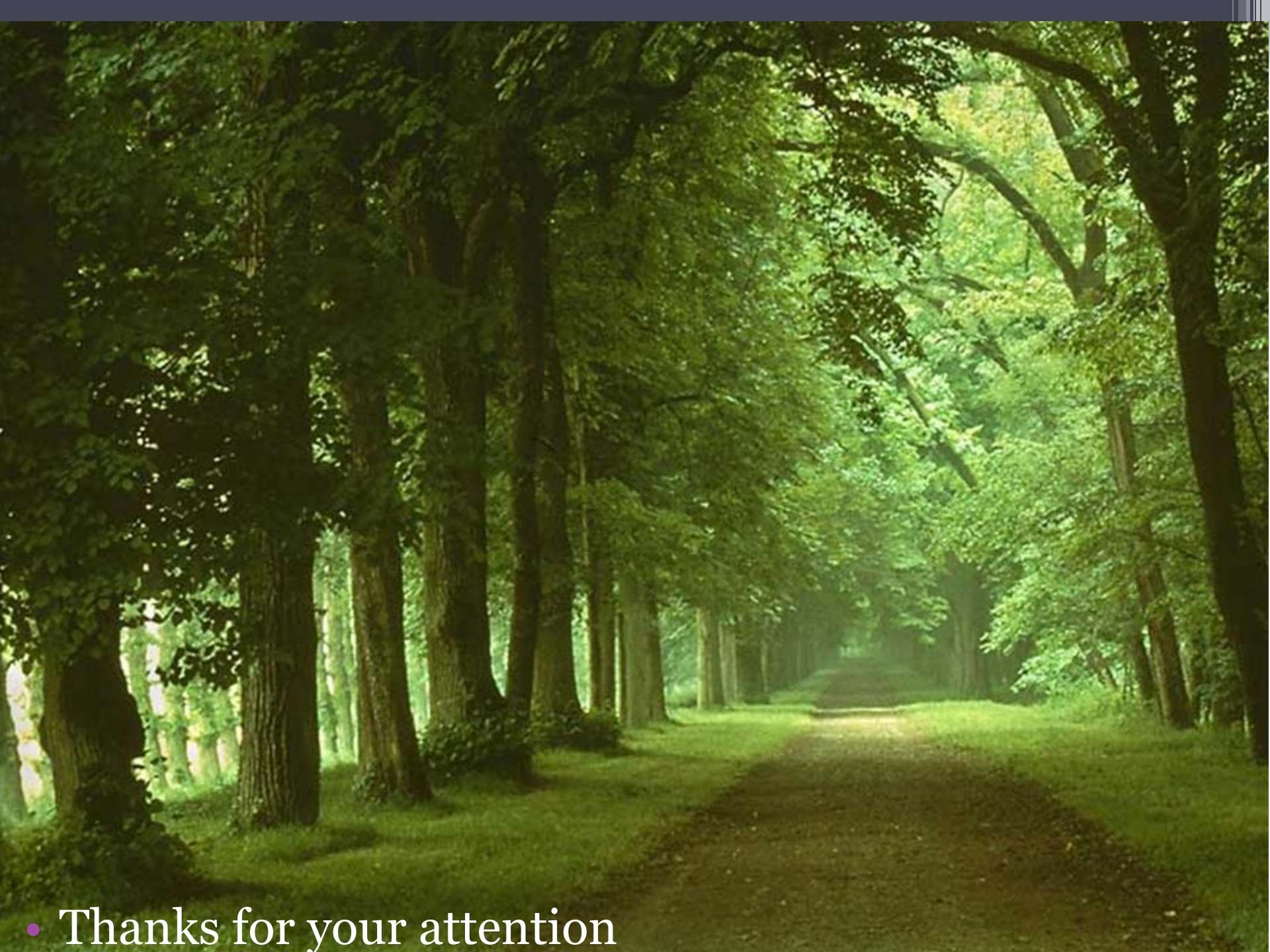
Challenging Cases

- Obesity
- Kyphoscoliosis
- Ankylosing Spondylitis
- Previous Spinal surgery
- OsteoArthritis
- Degenerative Disease

- (Radiologist , Anesthesiologist)

Complication

- Cerebral Herniation
- Pain
- Headach
- Bleeding
- Infection
- Subarachnoid Epidermal Cyst
- CSF Leak



- Thanks for your attention