Thoracoabdominal Approach to the Spine

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Indications for thoracoabdominal approach

Anatomy

Approaches

Complications
• Certain pathologies only reached through approach
  – Tumours
  – Infections
  – Trauma
  – Scoliosis / Kyphosis
Myeloma

Lat Spine

AP Spine
Myeloma

T2 Sag Spine

T2 Axial Spine
Posterior Vertebrectomy
Tumour Compression
Tumour Compression
Bone Compression
Bone Compression
Vertebrectomy
Vertebrectomy
Vertebrectomy
Unknown Primary

MRI T1 Sag

MRI T2 Sag

MRI Axial
L1 Burst Fracture

Pre Op  

Sitting Pre Op

Post Op
Trauma
L1 Burst Fracture
Vertebrectomy and Stabilisation
L1 Fracture
Neural Compression
Trauma Stabilisation
Trauma Stabilisation
Infection
Scoliosis
Scoliosis
Anatomy

- Esophagus
- Trachea
- Spinal cord
- Spinal column
- Kidney
- Ascending colon
- Rectum
- Larynx
- Lung
- Sternum
- Heart
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Transverse colon
- Coils of small intestine
Anatomy
Anatomy

L1
L2
L3
L4
L5
S1
S2
Anatomy

1. Quadratus lumborum
2. Psoas major
3. Iliacus
4. Posterior abdominal wall
Anatomy
Lateral Position, Left Sided Approach
Thoracoabdominal Approach
Thoracoabdominal Approach
Rib Excised
Chest Opened
Abdominal Cavity
Retroperitoneal Approach
Diaphragm
Syn Frame
Syn Frame
Segmental Veins

- Inferior vena cava
- Anterior internal vertebral venous plexus
- Posterior internal vertebral venous plexus
- Posterior external venous plexus
- Ascending lumbar v.
Anterolateral Approach
Anterolateral Approach
Spine Stabilised with an anterior plate
Complications

- Chest Related
  - Chest drain
  - Infection

- Vascular
  - Aorta
  - Segmental

- Lymphatics