

MINIMALLY INVASIVE TREATMENT OF SPINAL TUMORS USING THE VIPER2 SYSTEM

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History of Present Illness and Imaging:

- A 56-year-old male with a squamous cell tumor in L2, collapse of the L2 vertebral body and accompanying severe stenosis at the spinal canal (Figure 1)
- Imaging revealed lesions at the L1, L2, L3, L4 and L5 vertebral bodies. (Figure 2)



Figure 1: CT Scan

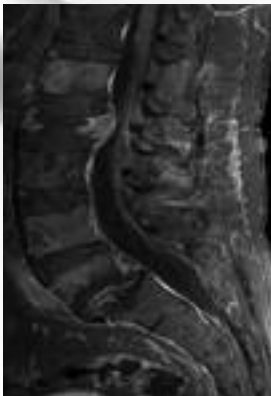


Figure 2: MRI Scan

Treatment Method and Materials:

- Bilateral transpedicular tumor resection and decompression was performed at L2 through the PIPELINE™ Expandable retractor placed through a 30mm mid-line incision
- Vertebroplasties were performed at L1, L3, L4 and L5 to support the weakened bone
- Ten Percutaneous VIPER Screws were placed bi-laterally at T11 - L3 and L4
- Two 200mm VIPER2 rods were percutaneously inserted starting from T11
- OR time was approximately 3.5 hours with 200cc of blood loss and no complications

Follow-up Results:

- Patient was ambulating on post-operative day 1 and was discharged on day 3
- Post-op imaging showed full height restoration at the L2 level (Figure 3) and good sagittal and coronal alignment (Figure 4)
- At three months, patient reports back pain is resolved and has resumed many normal activities

For this unfortunate tumor case, the VIPER2 System allowed us to fully treat this weakened patient with minimal blood loss. These minimally invasive stabilization techniques are extremely beneficial for ailing patients who may not be able to tolerate a traditional open procedure.

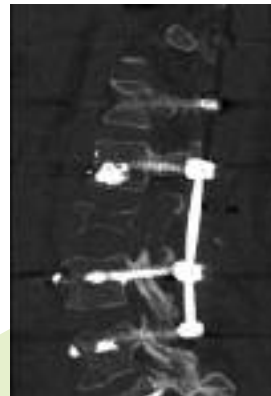


Figure 3: Lateral CT Scan



Figure 4: A-P Radiograph