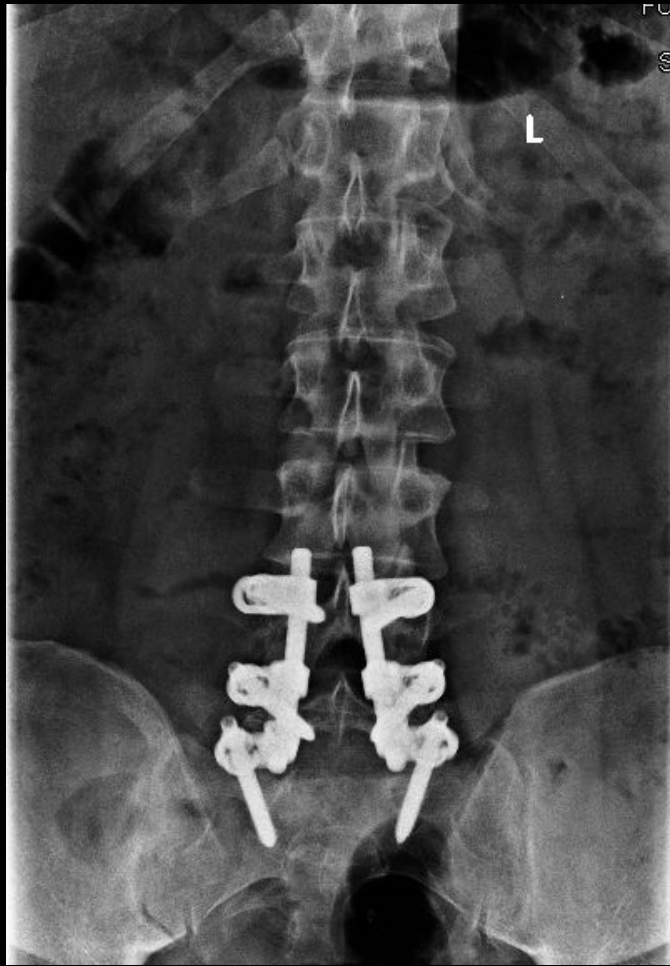


Case Review:



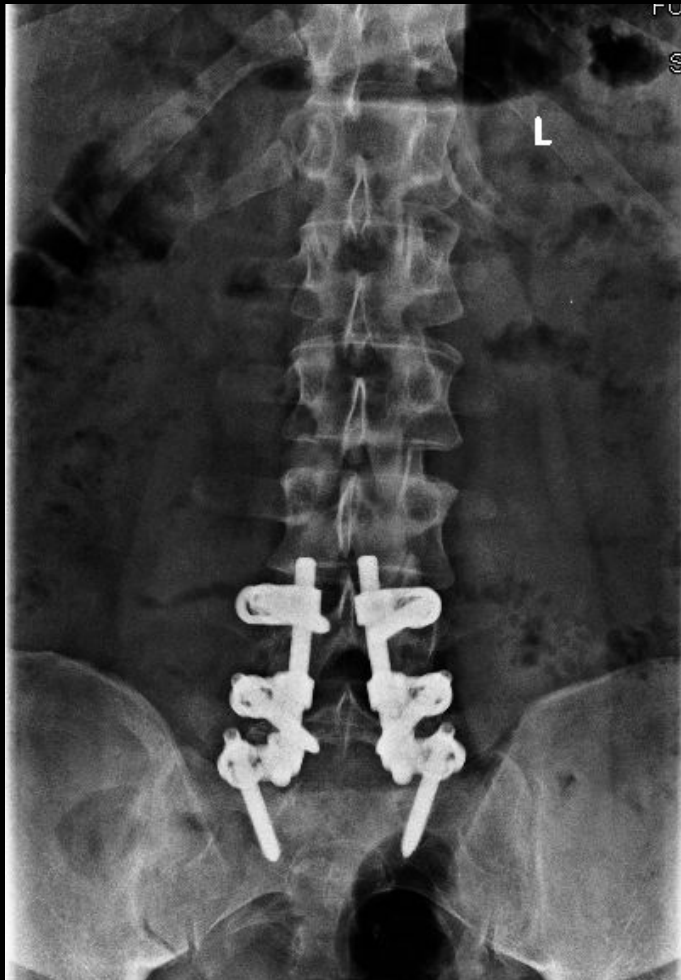
35 year old Norwegian male presented with Flatback Syndrome, psuedoarthrosis, and a screw in the spinal canal.

Robert S Pashman, MD
Scoliosis and Spinal Deformity Surgery
www.eSpine.com

Patient History

- This is a 35-year-old Norwegian male national.
- Status post L4-S1 posterior spinal fusion approximately 5-6 years ago.
- Presents with iatrogenic flat back.
- Low back pain.
- Left sided leg pain.
- Has an intracanal penetration of the screw on the left-hand side at L4, possible pseudoarthrosis and adjacent segment degeneration nerve compression.

Pre-op X-rays



The pedicle screws and rods merely act as a stabilization device, so that bone could heal as a fusion mass and stabilize. I do not see any evidence of that fusion having occurred and, therefore, the instrumentation at this point is probably loose. Confounding the situation even further is the fact is that the spine was instrumented in what we call lumbar kyphosis, which means that the normal sway back of your spine has been undermined by the instrumentation, per se. And, this has the ultimate effect that

Pre-op X-rays



it makes it difficult to stand up straight and also creates a significant amount of stress at the level above the fusion, because of the angulation of the spine.

Because this is a re-do operation and the fusion will have to be extended one level higher

The ascending screw at L4 on the left-hand side would also be removed and the nerve root explored at this level, to make sure that there was no permanent damage.

Indications for Surgery

1. Status post posterior instrumented fusion L4-S1.
2. Multiple level pseudoarthrosis and adjacent segment degeneration at L3-4.
3. Radiculopathy, L4-5 nerve root on the left due to intracanal penetration of pedicle screw on the left.
4. Iatrogenic flatback status post posterior instrumented fusion L4- S1.
5. Failed conservative therapy.

Surgical Strategy – stage one

- Abdominal retroperitoneal approach to the lumbosacral spine.
- Radical discectomy L3-4, L4-5, L5-S1.
- Anterior interbody fusion using polyetheretherketone recombinant bone morphogenetic protein interbody device to L3-4, L4-5, L5-S1.
- Anterior screw fixation L3-4, L4-5, L5-S1.
- Intraoperative somatosensory evoked potentials.
- Intraoperative fluoroscopy.

Surgical Strategy – stage two

- Posterior instrumented fusion, L3-S1, using stainless steel screw rod construct.
- Posterior spinal fusion, L3-S1, using locally harvested autogenous bone and RH BMP.
- Reexploration decompression, L4-5, L3-4, for removal of retained screw.
- Removal of retained instrumentation, L4-S1.
- Intraoperative SSEPs.
- Intraoperative fluoroscopy.

Post-op Films



- The patient's symptoms were resolved, and he has returned to his normal life activities. He reports walking and swimming on a regular basis.
- The patient is thrilled with his outcome.