

Unanticipated Complication of Cosmetic Surgery: A Case of Post-Abdominoplasty Syringomyelia and Cauda Equina Syndrome

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BACKGROUND

Syringomyelia is a fluid-filled cavity in the spinal cord that causes neurological damage

- Can arise from idiopathic causes, trauma, or other spinal abnormalities

Cauda equina syndrome affects the lumbar nerve roots, leading to lower limb weakness and bladder/bowel dysfunction

- Linked to spinal trauma or anesthesia complications

INTRODUCTION

Rarity: Although complications are more common after abdominoplasty than other aesthetic procedures, the development of syringomyelia and cauda equina syndrome following cosmetic surgery is exceedingly rare.

Objective: This case highlights a 33-year-old female who developed complex neurological complications after undergoing abdominoplasty, emphasizing the need to recognize and manage post-surgical neurological complications.

CASE STUDY

A 33-year-old female presented to pain clinic with complaints of chronic right leg pain and weakness five months after undergoing a six-hour abdominoplasty with liposuction

Post-operative course

- Developed diffuse right leg weakness, numbness, and bladder/bowel retention immediately after surgery

Physical Exam

- Decreased strength in right knee extension, ankle plantar flexion/dorsiflexion, and big toe extension
- Diminished patellar and Achilles reflexes, reduced sensation in L5 dermatome

Diagnostic findings

- MRI (Thoracic): Fluid-filled cavity in the conus medullaris
- EMG: Polyradiculopathy affecting S1/S2 segments with severe motor axon loss, consistent with cauda equina syndrome

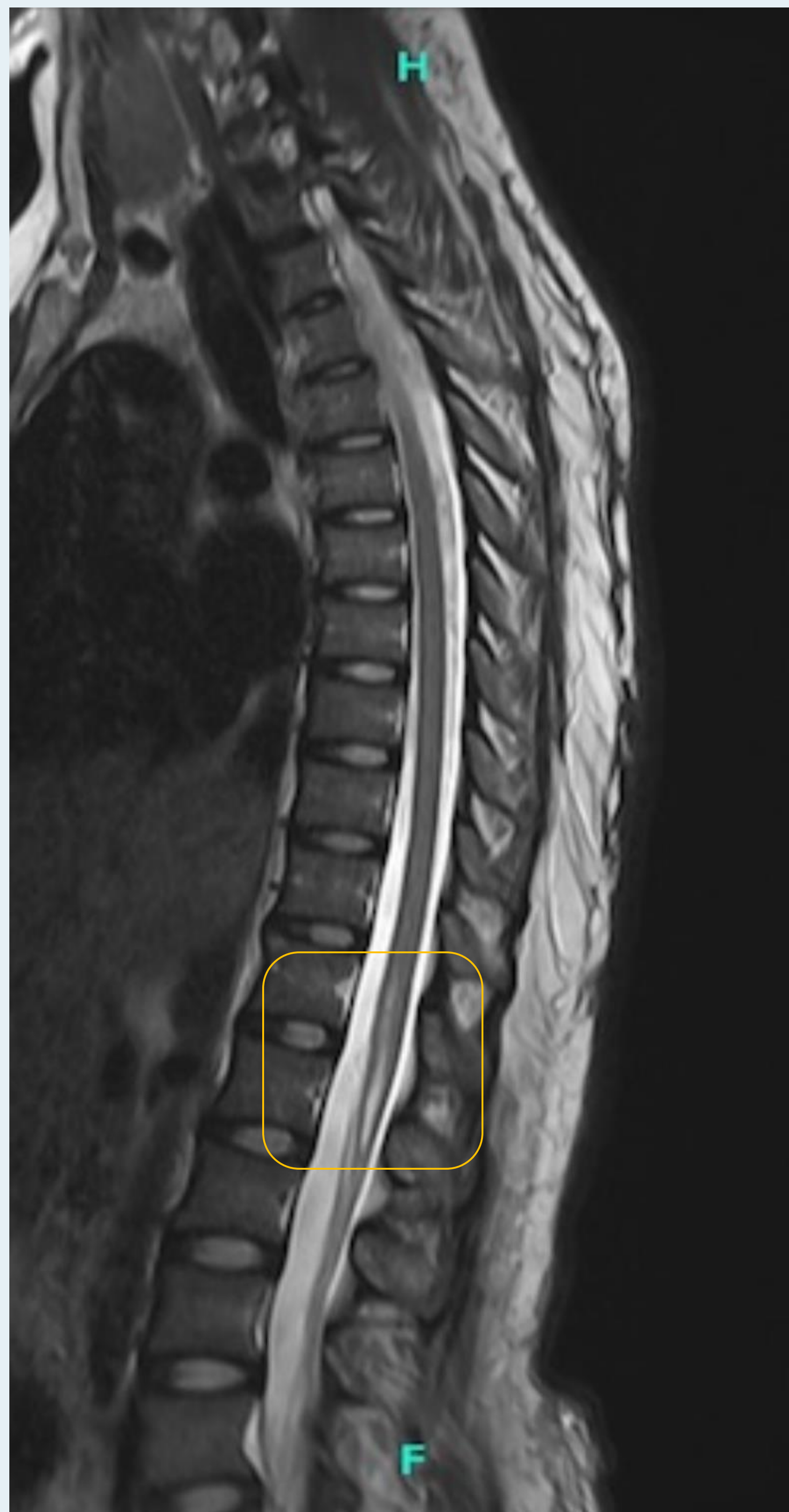


Figure 1: Sagittal T1-Weighted MRI

RESULTS

Immediate post-operative complications were consistent with cauda equina syndrome

MRI confirmed syringomyelia at the conus medullaris

EMG confirmed polyradiculopathy, suggesting complications linked to anesthesia or positioning during surgery

The patient showed improvement in leg strength with ongoing physical therapy, although residual weakness and numbness persisted.

CONCLUSION

This case highlights the rare occurrence of syringomyelia and cauda equina syndrome following cosmetic surgery.

These complications are potentially linked to epidural anesthesia and prolonged surgical positioning

Early recognition, diagnosis, and intervention are crucial in preventing long-term disability

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