

BACKGROUND

- Spinal epidural lipomatosis (SEL) involves abnormal fat accumulation in the epidural space and is often linked to chronic steroid use, obesity, and endocrine disorders (1,2).
- It can cause neurological symptoms such as myelopathy, cauda equina syndrome, and chronic back pain.
- Long-term steroid and hormone therapies are associated with SEL and subcutaneous lipomas, especially in patients with malignancies like prostate cancer (3,4).
- However, cases documenting both SEL and subcutaneous lipomas are rare, particularly in the context of prostate cancer treatment.

PURPOSE

- The purpose of this case report is to highlight SEL as a potential complication from long-term steroid and hormone therapy, with consideration that when possible, cessation of treatment could alleviate radiculopathic symptoms and limit lipoma growth.

CASE DESCRIPTION

- **Presentation:** A 78-year-old male with a history of high-risk localized prostate adenocarcinoma, managed with leuprolide, abiraterone, and long-term prednisone for two years, presented with chronic low back pain and radiculopathic symptoms. Concurrently, the patient developed multiple subcutaneous lipomas on his torso, back, and upper limbs.
- **Imaging:** MRI revealed multilevel degenerative changes, severe spinal stenosis, and dorsal epidural lipomatosis, without evidence of metastatic disease (Image 1). Ultrasound revealed multiple lipomas (Image 2).
- **Treatment:** Given the development of diffuse subcutaneous lipomas, cessation of steroids was initiated.
- **Results:** Three months thereafter, the radiculopathic symptoms resolved. However, the diffuse subcutaneous lipomas continued to enlarge and became increasingly painful, leading to multiple surgical excisions which provided significant pain relief post-procedurally.

Prompt clinical evaluation of progressive radiculopathy and subcutaneous lipomas is recommended for cancer patients undergoing hormone and steroid treatment.



Image 1. Lumbar spine MRI during (left) and 3 months post-chemotherapy (right) with reduced spinal canal stenosis.

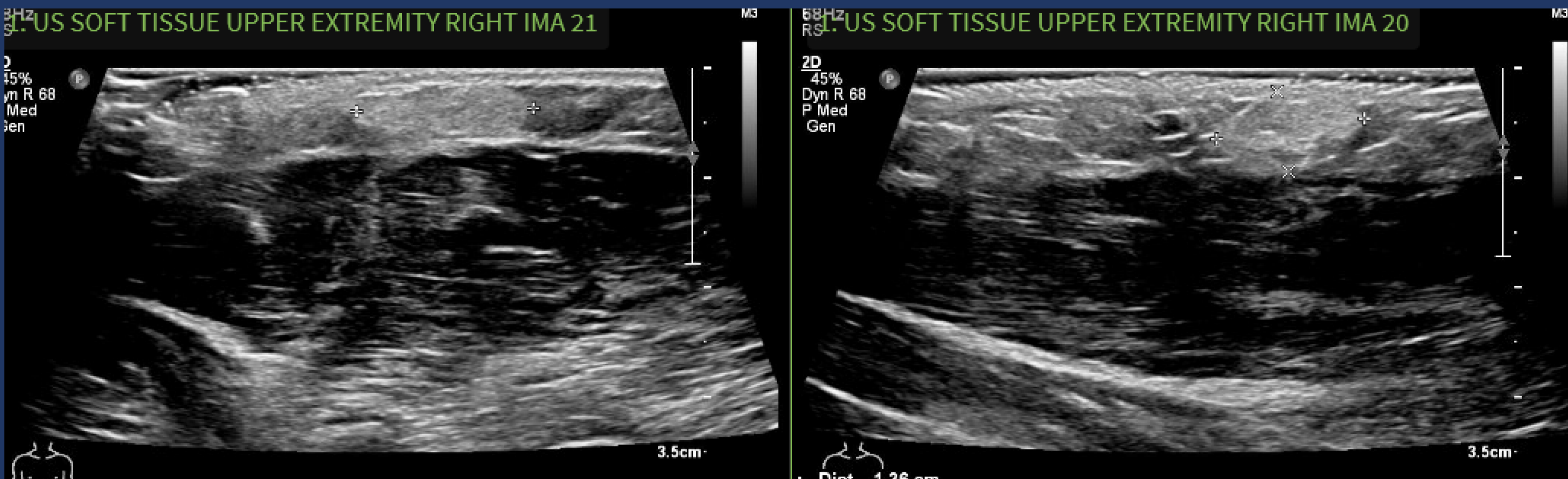


Image 2. Ultrasound images of diffuse subcutaneous lipomas located in the right upper extremity.

DISCUSSION

- This case highlights the interplay between chronic steroid and hormone therapy and the development of lipomas, both subcutaneous and epidural.
- The patient's radiculopathic symptoms, initially attributed to degenerative spine disease, resolved after the cessation of prednisone, suggesting a relationship between steroid therapy and the size of epidural lipomatosis.
- Long-term corticosteroid therapy has been well-documented to induce adipose tissue hypertrophy, leading to conditions such as SEL and subcutaneous lipomas. However, the concurrent presentation of these conditions in a single patient with prostate cancer is uncommon.
- Comprehensive evaluation and multidisciplinary management of chronic low back pain in cancer survivors is crucial when considering rare but significant complications such as SEL and symptomatic subcutaneous lipomas.

CONCLUSION

- Managing chronic low back pain in prostate cancer survivors with concurrent SEL and multiple subcutaneous lipomas is challenging.
- The rarity of these cases highlights the need for thorough evaluation, awareness of complications from long-term steroid and hormone therapy, and tailored management strategies to optimize patient outcomes.

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