

Joint Effort: Tackling Hemarthritic Pain

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Case History

- 83-year-old male with history of urothelial cancer (status-post bladder resection) and chronic opioid therapy presenting with acute left shoulder pain.
- Home analgesics: Hydrocodone 5mg four times daily
- Prior History: Multiple emergency department visits for spontaneous left hip and left elbow hematomas.
 - Not on anticoagulation
 - Hematologic workup largely unremarkable.
- CT imaging of the left shoulder revealed numerous rim-enhancing intramuscular collections and axillary lymphadenopathy.

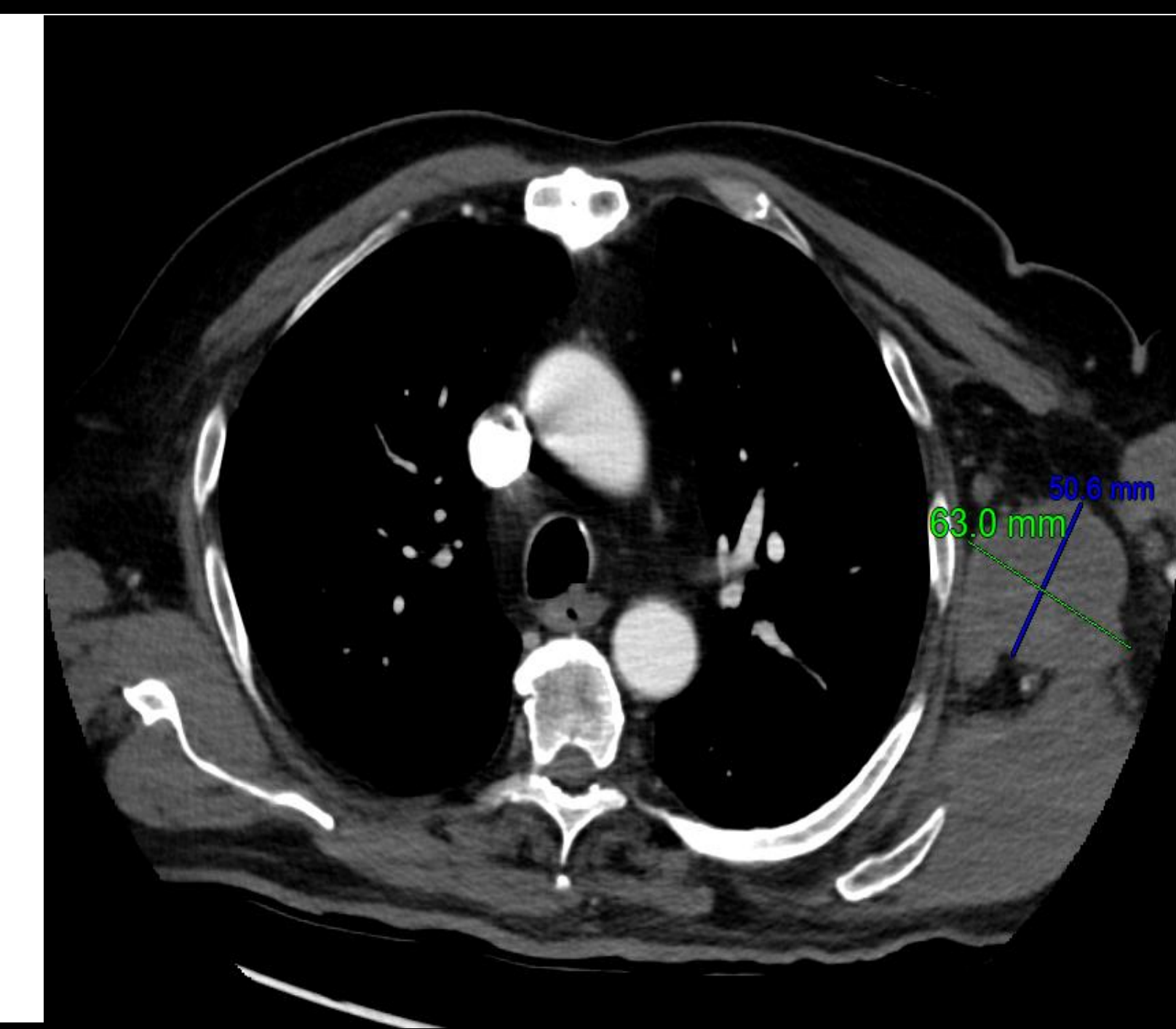
Differential Diagnoses

- Hematoma precipitated pain
- Adhesive Capsulitis
- Arthritis

Imaging



CT imaging showing multiple innumerable infiltrative-type low-attenuation foci throughout multiple muscles of the left shoulder and upper arm. Additional enlarged left axillary masses/nodes noted.



Treatment Course

- The inpatient pain medicine team was consulted and given the uncertain etiology of patient's pain, conservative management was initially utilized with as needed oxycodone and IV hydromorphone for breakthrough pain.
- Pain was initially well controlled, however it began to increase with expanding hematoma. Patient was treated with a course of tranexamic acid for clot stabilization. Pain significantly improved following treatment .
- Given patient's oncology history, axillary and left shoulder biopsies were obtained . This revealed a poorly differentiated malignant neoplasm that was unable to be further classified with immunohistochemical staining.

Discussion

Complex cases of pain can be hard to tackle. It takes a joint effort from the medical team to determine the best course of treatment for a patient. Tranexamic acid is an antifibrinolytic that can be used pre-operatively to reduce blood loss. It has varying efficacy in reducing hemarthrosis related pain following an arthroscopic procedure. This case outlines the potential use of tranexamic acid in treating non-traumatic hemarthrosis related pain.

Further Workup

Common cancers that have been shown to be associated with spontaneous hematomas include lymphoma, leukemia, prostate, breast, and in some reports urothelial cancer. Although immunohistochemical staining was unable to further classify this neoplasm, cancer genome sequencing suggested mutations were mostly the result of UV exposure, suggesting a possible cutaneous origin. Palliative care was ultimately consulted and through shared decision making with the patient, family, and treatment team, it was decided to forgo further cancer treatment and focus on pain control and improving quality of life.

References

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- Pecold J, Al-Jeabory M, Krupowies M, Manka E, Smereka A, Ladny JR, Szarpak L. Tranexamic Acid for Shoulder Arthroplasty: A Systematic Review and Meta-Analysis.
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Summer 2024:
Spontaneous left hip
hemarthrosis.

Fall 2024:
Spontaneous left
elbow hemarthrosis.

January 2025:
Spontaneous left
shoulder hemarthrosis.

January 2025:
Biopsy revealed poorly
differentiated
malignant neoplasm.