

Soft tissue Hematoma after ESI in patient with known chronic thrombocytopenia

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INTRODUCTION

- Epidural steroid injections (ESI) are widely used in the U.S. to treat pain from inflamed nerve roots, spinal stenosis, and discogenic pain. Recent case reports have shown successful treatment of PHN with ESIs.
- Complications include nerve injury, infections, dural puncture, allergic reactions, and bleeding, including epidural hematomas.
- Risk factors for hematomas include anticoagulant therapy, coagulopathies, thrombocytopenia, and traumatic needle insertion.

CASE PRESENTATION

- 85-year-old female with atrial fibrillation, congestive heart failure, hypertension, liver cirrhosis, CKD, and thrombocytopenia presented with right chest wall burning pain secondary to PHN after shingles.
- Previous treatments, including lidocaine and fentanyl patches, pregabalin, gabapentin, and opioids, provided limited relief.
- Platelet count, measured at 107,000 fifteen days prior, was consistent with baseline levels.
- Patient discontinued Excedrin six days prior to procedure.
- Fluoroscopy was used to identify the T2-T3 level
- Osseous formation made epidural space access difficult, leading to an attempt at the T3-T4 level.
- Upon needle removal and new skin entry, a small superficial tissue bulge at the right thoracic paraspinal site indicated a potential hematoma.
- Procedure was aborted, hematoma borders were marked, and the patient was advised on emergency care indicators.
- Follow-up showed no hematoma size increase and resolution without sequelae.

Hematoma development in patient with known thrombocytopenia undergoing ESI for refractory post herpetic neuralgia



Image A, B – Multi-view of hematoma following attempted ESI procedure



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DISCUSSION

- Despite multiple available treatment options for PHN, over 50% of patients experience persistent pain.
- ESIs are believed to relieve neuropathic pain by reducing deafferentation and inflammation-induced neuronal ischemia.
- Guidelines should be followed for discontinuing anticoagulants, obtaining blood tests, and performing a thorough physical examination.
- Soft tissue hematomas are managed conservatively as bleeding typically stops spontaneously.
- Patients should monitor hematoma growth and watch new symptoms including numbness, tingling, weakness, or bladder and bowel incontinence, and seek emergency care.
- Early detection and procedure discontinuation will likely prevent further complications.

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