

Epidural Catheters for Cervical Epidural Steroid Injections to Target Higher Cervical Pathology: Clinical Images in Practice



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Introduction

Cervical radicular pain is commonly treated with cervical epidural steroid injections (CESI).

The interlaminar approach is commonly utilized as it avoids vascular structures and is commonly performed at the C7-T1 interspace.

However, the epidural space becomes narrower at higher levels, limiting the ability to perform this approach at higher cervical levels

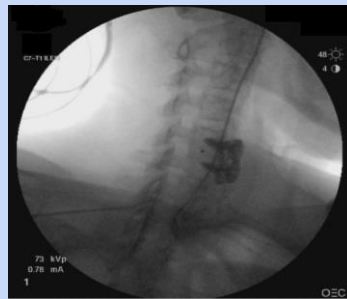
Materials and Methods

An interlaminar CESI at the C7-T1 interspace was completed, which demonstrated minimal cephalic spread (Figure 1).

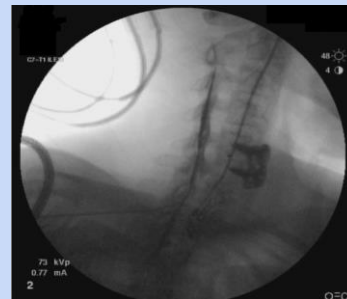
A microcatheter was advanced through the Touhy needle to the C3-C4 level which demonstrated diffuse spread around the C3-C4 and C4-C5 levels (Figure 2).

Key Takeaways

An **epidural catheter** can be considered when **targeting higher cervical pathology** with the **interlaminar approach** for **cervical epidural steroid injections**.



1.



2.

The Case

We present a female patient in her early 50s with a prior history of cervical fusion. She had new onset disc bulges at C3-C4 and C4-C5 along with neck pain, radicular symptoms, and headache complaints.

The patient obtained 90% relief of her radicular symptoms and headache complaints which were sustained at her 3-month follow-up.

Discussion

The epidural space is defined by the posterior longitudinal ligament, pedicles, intervertebral foramen, the vertebral lamina, and the ligamentum flavum.

As the posterior epidural space above C7-T1 becomes more narrow, the loss-of-resistance technique or the hanging drop technique becomes more perilous.

References

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