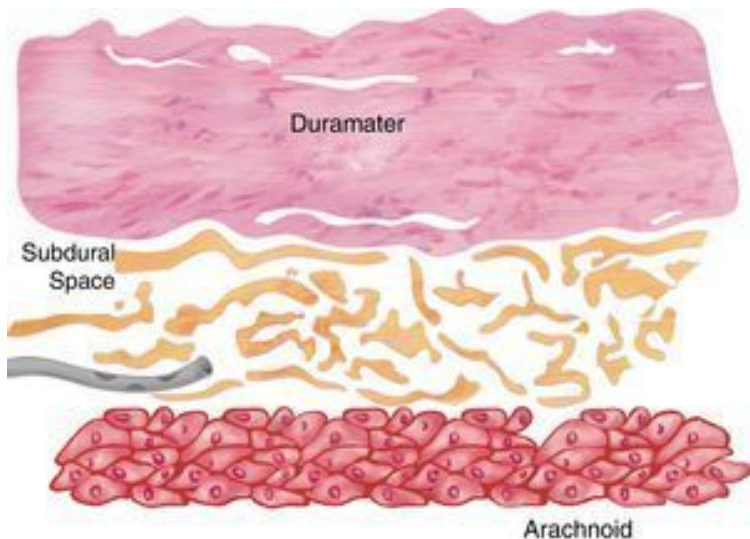


# Suspected Inadvertent Subdural Catheter Placement Leading to Maternal Cardiac Arrest

Sagar Patel, MD



## INCIDENCE

Inadvertent subdural catheter placement occurs in 0.5%–1% of epidural insertions.

## DIAGNOSIS

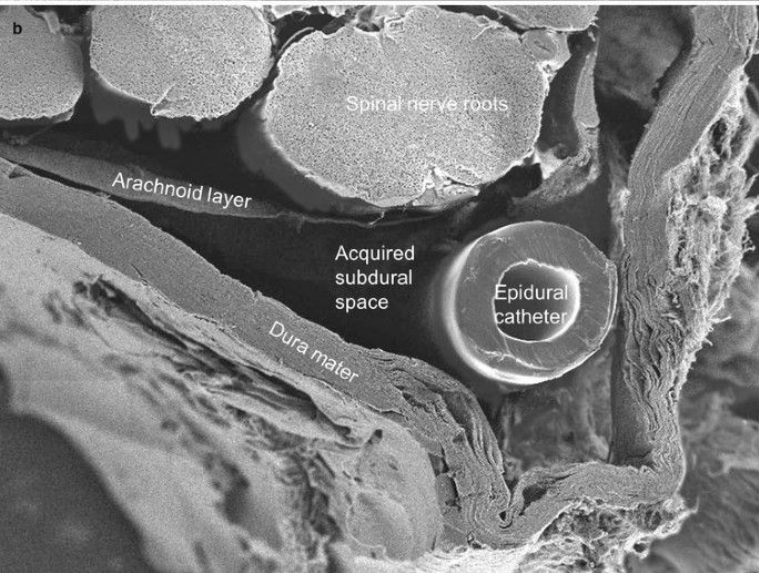
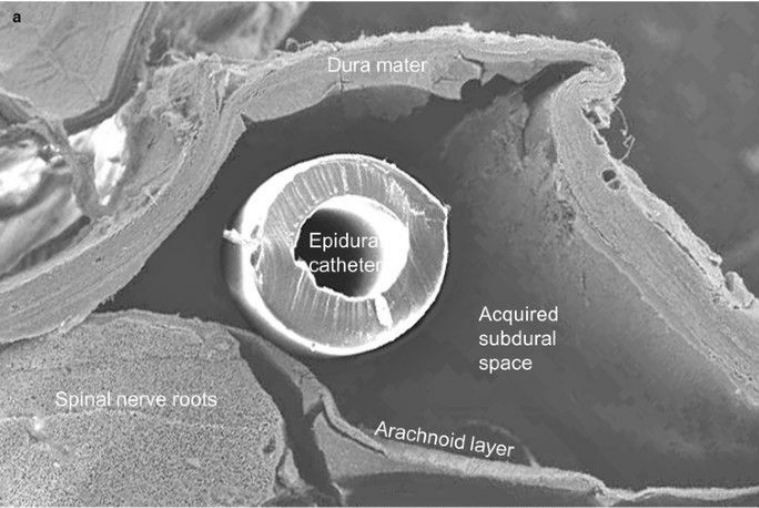
Diagnosis is difficult due to variable clinical presentation.

## PRESENTATION

Symptoms: delayed sensory block, atypical spread, incomplete block, and rarely, cardiopulmonary compromise.

## SEVERE OUTCOMES

This case presents maternal cardiac arrest likely caused by a subdural anesthetic.



# Case Summary

## PATIENT CHARACTERISTICS

- 32yo G4P0030
- 41 weeks gestation
- Induction of labor for post dates

## NEURAXIAL CHARACTERISTICS

- Standard epidural (diluted space with 3mL of saline)
- Negative aspiration and test dose

## TIMELINE

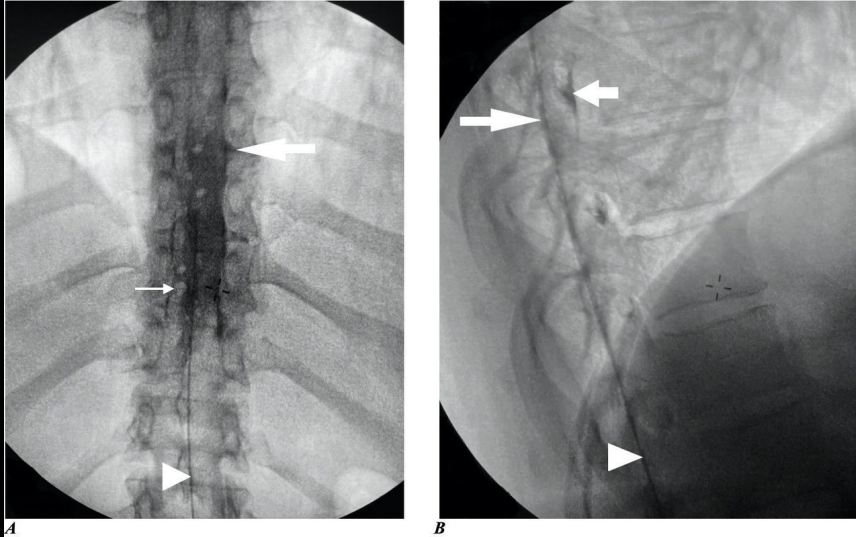
- 10mL of 0.1% bupivacaine with 2mcg/mL of fentanyl as initial load
- Patchy pain relief with effect on lower extremities

*45 minutes later*

- Hypertensive
- "I feel numb all over, I think I'm slipping away"
- Unresponsiveness

Transferred to OR -> peri-mortem cesarean delivery

CPR for 6 minutes and 1mg of epinephrine with ROSC



## HOW TO DIAGNOSE A SUBDURAL BLOCK

- High clinical suspicion
- Often a diagnosis of exclusion without imaging
- Imaging is the only true definitive way to diagnose a subdural catheter

## RISK FACTORS

- Difficult catheter placement
- Aggressive needle manipulation
- Prior back surgery
- Rotation of the needle once in the epidural space
- CSE and DPE techniques
- Use of stiff or multiport catheters