

# Migration Of Left IJV Catheter Into Pleural Space

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## Abstract

To The Editor,

We had an unusual complication following left IJV cannulation. A 35 year old female patient was posted for mitral valve repair surgery. Pre-operatively under local anesthesia, right IJV cannulation was attempted but failed. The left IJV was then cannulated by the central approach. Using the seldinger technique, a 7.5 Fr triple lumen catheter was inserted. As the J tip of the guide wire was damaged during attempts on right side, we used the straight end of the guide wire on the left side. Proper placement was confirmed by aspiration of blood through all three ports, as well as the CVP tracing on the monitor.

At closure a bulge was seen in the left pleura and an intercoastal drain was placed. The patient was transferred post-operatively to the intensive care unit and put on a ventilator as part of the protocol. It was noticed that blood products going through IJV appeared to be coming out through the ICD. All fluids were stopped through the IJV and given through a peripheral line. An x-ray chest was suggestive of intra-pleural placement of catheter (photo1).

## Figure 1

Figure 1: Photo: X-ray P-A view of chest showing the migrated tip of catheter.



The triple lumen was removed. In view of a continuing drain output, the patient was explored. No injury was found to the great vessels. 500cc of clots was removed from the pleural cavity and patient shifted to ICU. The patient was extubated the same day and discharged in a week. The patient remained hemodynamically stable through all the above mentioned events.

The aspiration of blood from all ports of triple lumen, as well as the CVP tracing confirmed intravascular placement of catheter; with the possible migration of catheter later on

through a nick made by the straight end of the guide wire. Due to curved course of the left IJV trauma to vessel wall can occur especially when the straight end is used. Haemothorax following IJV cannulation due to subclavian artery trauma is a known complication<sup>1</sup>. There was no accidental arterial puncture during cannulation nor any damage to great vessels revealed on re-exploration.

We do not justify using the straight end of the guide wire, but such a migration of the catheter has not been reported.

The theoretical possibility is higher on the left due to the curved course of the IJV.

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### **References**

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