



CS006

Cardiothoracic Surgery & Interventions • Poster Presentation

GUIDE WIRE MISADVENTURE: A DUO OF INADVERTENT INTRAVASCULAR MIGRATION

Peter o Adeoye, Somto E Nwabueze, John Awodi, Denen Atsukwei, Babjide O Ayandele

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Background: Central venous catheterization (CVC) is an integral part of patient care in the intensive care unit. The Seldinger technique, known for its minimal invasiveness, has become the standard for CVC insertion. Despite the technique's effectiveness and safety, guide wires—integral to the procedure—carry risks, including a rare but serious complication: intrathoracic migration of a retained guide wire. Although the overall complication rate for CVC insertion is around 11.8%, intrathoracic migration of a guide wire has not been previously reported, underscoring its rarity and the necessity of meticulous guide wire management.

Methodology: We present a case series of two patients who experienced this rare complication of retained and migrated guide wires following CVC insertion. Clinical presentation, imaging findings, and multidisciplinary management strategies were reviewed and documented for both cases.

Results: In the first case, a 25-year-old male developed a right hemothorax after the guide wire migrated into the thoracic cavity. In the second case, a 49-year-old female had a retained intravascular guide wire that migrated from the subclavian vein to the femoral vein, complicated by thrombosis. Both patients underwent successful retrieval and treatment through a multidisciplinary approach, with favorable outcomes.

Conclusion: These cases highlight the importance of vigilant guide wire management and prompt recognition of this potentially life-threatening complication. This case series emphasizes the need for healthcare providers to be aware of the risks associated with central venous catheterization and to adopt a multidisciplinary approach to manage these rare but serious complications.

Keywords: Central venous catheterization, Seldinger technique, Guide wire migration, intrathoracic complication