Malposition of a right subclavian central line in the anterior mediastinum with vena caval perforation

Abstract:

Central venous catheter (CVC) placement is a routine procedure in the management of critically ill patients. It is important to ensure correct positioning of the catheter tip just above the junction of the superior vena cava and the right atrium, to reduce associated complications and to optimize catheter function. The incidence of catheter misplacement is approximately 3%-4% for both subclavian and internal jugular vein access procedures. CVC placement in the right subclavian vein is associated with a higher risk of malposition. We report an unexpected secondary malposition of a right subclavian CVC in the anterior mediastinum, with resultant vena caval perforation in a patient admitted to the neuro-critical care unit after undergoing a craniotomy procedure.