



Spontaneous Rupture of Subclavian Artery Branch Leads to Compromised Airway

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Abstract

Though rare, a spontaneous rupture of a branch of the left subclavian artery leading to a compromised airway requiring emergent intervention by experienced staff can occur. In such cases, the expanding hematoma can cause tracheal deviation. Here we discuss the emergent airway management of such a case emphasizing the importance of early intervention by an experienced airway management team.

Keywords: Subclavian artery, Myocardial infarction, Dyspnea

Images in Anesthesiology

We present the case of a spontaneous rupture of a branch of the left subclavian artery leading to a compromised airway requiring emergent intervention by experienced staff. Such causes of tracheal deviation are exceedingly rare, though may become more common as people take antiplatelet drugs as a means to prevent pathology induced clots.

A non-stridorous 60 year old male with past medical history significant for myocardial infarction and multiple strokes currently taking clopidogrel and rivaroxaban. While intoxicated, he fell from a standing position and presented to an outside hospital with neck pain and dyspnea. He was found to have an expanding neck hematoma and was transferred to our tertiary care center where the hematoma was clearly expanding further and causing impending airway

compromise. CT imaging demonstrated that the retropharyngeal hematoma was arising from a tear in a prevertebral artery arising from the left subclavian artery and causing tracheal deviation. The decision was made to perform an awake, spontaneously breathing, fiberoptic intubation to protect the airway so that the patient could undergo an emergent embolization procedure.

Of 17 reported spontaneous ruptures of branches of the subclavian artery¹, only 3 have been associated with dyspnea. Of the 2 reported deaths, one resulted from airway compromise.² Endovascular repair was performed on two of these cases without complication. In the case presented here, with the patient's airway secured and appropriate anesthesia induced, successful repair of the ruptured vessel was able to occur and the patient was admitted to the ICU post-operatively for further management.

Quick Response Code:



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