

PP123 THE HIDDEN JEWEL IN SYNCOPE: A CASE COMPILATION

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Introduction

Syncope is a relatively common presentation in emergency department but rare as an etiology of pulmonary embolism. The prevalence of pulmonary embolism (PE) among these patients is not well documented and current guidelines do not include a workup for pulmonary embolism as part of initial assessment of syncope. We share a compilation of pulmonary embolism cases with syncope as its presenting complaint.

Case description

We report 2 cases of pulmonary embolism, both had syncope as their initial presentation. The first case was a massive pulmonary embolism involving a young gentleman without any risk factors. He underwent surgical embolectomy and discharged with life-long anticoagulant. While the second case was experienced by a middle-aged lady who had risk factors with anemia as a confounding factor and treated with oral anticoagulant for the non-massive pulmonary embolism.

Discussion

Syncope as a presentation of pulmonary embolism only occurs in less than 1%. However, historically syncope is a predictor of mortality in PE. Syncope in the setting of pulmonary embolism can be the

result of three possible mechanisms: reduction in cardiac output due to right ventricular failure, arrhythmias associated with right ventricular overload and vasovagal reflex. The clinician should seek the following clues to the diagnosis of pulmonary embolism in patients who have had a syncopal episode: (a) hypotension and tachycardia or transient bradyarrhythmia; (b) acute cor pulmonale according to electrocardiogram criteria or physical examination; and (c) other signs and symptoms indicative of pulmonary embolism, (d) confounding factors masking the initial presentation. There is conflicting data concerning syncope and the prognosis of acute pulmonary embolism. It is important to determine whether syncope is associated with poor prognosis to allow prompt risk stratification and appropriate treatment.

Conclusion

Syncope in pulmonary embolism could have poor prognosis and might lead to an immediate death. Thus, any patient who visited to the emergency department with the symptoms should be investigated thoroughly and pulmonary embolism must be excluded as one of the underlying etiologies