

Letters to the Editor

Pulmonary Embolism Clinical Decision Tools Can Be Helpful During In-Flight Medical Emergencies

Original Article: Ruling Out Pulmonary Embolism in the Primary Care Setting

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See additional reader comments at: <https://www.aafp.org/afp/2018/0601/p750.html>

To the Editor: We appreciated Dr. Yunyongyings's article and believe that it is also applicable during air travel for an in-flight medical event. When a physician responds to a request to aid an ill passenger, the Wells or Geneva score can be used in a diagnostic workup. However, the Pulmonary Embolism Rule-out Criteria cannot be used because it includes oxygen saturation level, and medical emergency kits on U.S. airplanes do not contain pulse oximeters.

In 2013, a study reported respiratory symptoms as the second most common in-flight medical emergency, and literature reports a range from 8.1% to 12.1%.^{1,2} Thromboembolic episodes may occur during air travel, especially with long flights.^{3,4} In 2018, a 28-year-old woman died from a pulmonary embolism (PE) during a flight from Hawaii to Texas.⁵ Because a central registry does not exist for in-flight medical events,⁶ it is difficult to estimate the number of cases of PE classified under respiratory symptoms.

A physician responding to an emergency during a flight must make a diagnosis from findings obtained in the restrictive confines of the airplane. The suspected presence of deep venous thrombosis is supportive of a PE diagnosis, but its absence does not rule it out. Tachycardia is often an important finding. A Wells or Geneva score of less than 2 indicates a low risk of PE.

U.S. airlines contract with medical agencies to provide an on-the-ground, on-call physician specialized in aeronautical medical emergencies. After the specialist evaluates findings from the history, physical, and Wells or Geneva score,

guidance is then provided; the medical goal is stabilization of the ill passenger for the remainder of the flight. If stabilization is not possible, the decision to divert the airplane is made by the pilot. The nearest airport chosen should have a medical facility that can provide the necessary care.

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Correction

Incorrect vaccine recommendations. The Medicine by the Numbers "Pneumococcal Vaccines in Chronic Obstructive Pulmonary Disease" (April 1, 2018, p. 463) included inaccurate details regarding the recommendations for administering pneumococcal vaccinations in patients with chronic obstructive pulmonary disease. The last two sentences of the article on page 464 should have read: "The Centers for Disease Control and Prevention recommends that anyone with chronic pulmonary disease between 19 and 64 years of age should routinely receive the 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23). At age 65 years, these patients should next receive the 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13) if they have not previously received it, and another dose of the PPSV23 at least one year after receiving PCV13 and at least 5 years after receiving PPSV23." The reference for this sentence (reference 10) was also updated to the following: "Centers for Disease Control and Prevention. Pneumococcal vaccination: summary of who and when to vaccinate. Atlanta, Ga.: December 6, 2017. <https://www.cdc.gov/vaccines/vpd/pneumo/hcp/who-when-to-vaccinate.html>. Accessed April 10, 2018." The online version of the article has been corrected. ■

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