

High Altitude Help: Medical Emergencies in the Air

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Advanced practitioners (APs) in hematology and oncology work in various practice settings. Many of us are well trained to diagnose and manage common oncologic emergencies, such as acute renal failure, severe anemia, hypercalcemia of malignancy, and sepsis. There is security in managing these acute conditions in a hospital setting with immediate access to a health-care team. Alternatively, when providing care to individuals outside of the hospital setting, one must manage an unfamiliar clinical scenario in a foreign environment with limited resources. One of the articles in this issue addresses a common oncologic emergency, and it made me think about my experiences managing emergencies in a hospital setting, as well as one instance that occurred on a commercial aircraft.

I was traveling on a 2-hour flight from Florida to New York when an older woman collapsed shortly after takeoff. I witnessed her exiting the restroom and fall to the floor. I rushed out of my seat to see if she was okay while the flight attendant called for help. I had just finished my mandatory, biannual cardiopulmonary resuscitation (CPR) recertification, but I was not expecting to

potentially use what I had learned at 37,000 feet in the air.

The woman seemed groggy but arousable. Her son explained that she was returning home to Europe after a 7-day cruise. She had just finished chemotherapy for breast cancer and celebrated her 76th birthday. I did not fully learn her medical history as English was not their first language. I did not have her medication list or her recent labs as I would in a hospital. Fortunately, the flight attendant provided a blood pressure cuff and stethoscope. I obtained her vital signs to find she was hypotensive and tachycardic, and rubbing her abdomen as if she were in pain. I asked the family if they would want her to be resuscitated if she stopped breathing, and they said yes. I assessed the situation and identified resources to help.

According to the Bureau of Transportation Statistics, US airlines carried 77.7 million passengers in November 2023 alone (US Department of Transportation, 2024). It is difficult to determine the incidence of airline emergencies, as there is no agreed-upon reporting system or system of classifying an emergency (Kodama et al., 2018). According to the Centers for Disease Control and Prevention (CDC),

medical emergencies occur on approximately 1 of every 604 flights. Common emergencies include syncope, respiratory symptoms, nausea, and vomiting. It is estimated that in 90% of these emergencies, aircraft continue to their destination and the flight crew manages 60% of these without needing passengers to assist (CDC, 2024). Medical personnel are protected by the 1998 Aviation Medical Assistance Act (AMAA) of the United States for providing good-faith medical care in the event of a medical emergency.

Administering emergency care in a cramped airplane galley is unlike any other experience you will have. There is a lack of space and privacy. All eyes are on you, and passengers are interested in learning what is happening. The flight attendants and I were able to secure a curtain in the forward cabin to provide some privacy for the patient. The captain phoned a ground-based telehealth company to assist in medical decision-making. An emergency medical technician (EMT) came to assist, whom I was grateful for. We took turns checking her blood pressure and pulse every 2 minutes.

About 30 minutes into the flight, we had difficulty finding her blood pressure, and her pulse was fast but seemed weak. We decided to place an IV catheter and give her 500 mL of normal saline. She was still responsive, but all we could do was wait and hope that it was simple case of dehydration. I wondered what the defibrillator looked like in case I needed to administer a shock. Do I turn it on and then attach the pads? If I needed to administer CPR, would it be a 15:2 compression-to-breath ratio? What types of emergency medicines would need to be administered? So many questions ran through my head. I was out of my comfort zone but remained calm because I had to.

As we approached Washington air space just 20 minutes from New York, the captain asked me if we should land the plane or if we could make it to our original destination. Before I could respond, and to our surprise, the woman sat up and asked her son, “When are we landing? I don’t want to miss my flight home.”

I was so happy, I almost cried. Once the plane landed in New York, she was taken by EMS to a local hospital. With this experience, I had a greater appreciation for flight attendants and their role in passenger safety, and felt honored to be able utilize my skills to assist others outside of the hospital.

IN THIS ISSUE

Within this issue, a post hoc analysis of patients who received amivantamab in the CHRYSALIS trial provides insight into infusion duration, as well as infusion-related reaction timing and severity. Read the online edition of an article on the impact of pelvic floor rehabilitation for patients experiencing bowel dysfunction after low anterior resection for rectosigmoid or rectal cancers. Also online, you can find an article on how APs can ensure the timely management of chemotherapy-induced neutropenia. The last of our online articles provides a comprehensive overview of newer JAK inhibitors for myelofibrosis.

A review article delves into how to optimize the use of growth factor in patients receiving CAR T-cell therapy, including possible effects on safety and efficacy. Music therapy has been attempted in adult populations; this study in the pediatric population shows promising data on its use as a complementary treatment to help decrease stress and pain. Finally, a case study showcases the use of a 31-gene expression profile to help clinicians make treatment plan decisions for patients with stage I, II, or III cutaneous melanoma. ●

References

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