Takotsubo Cardiomyopathy in the Setting of Immersion Pulmonary Edema: Case Series

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Abstract
Immersion Pulmonary Edema is a unique medical condition being increasingly described in the medical literature as sudden-onset pulmonary edema in the setting of scuba diving and or swimming. Case reports have associated immersion pulmonary edema with cardiac dysfunction, but there are no known case reports describing submersion pulmonary edema resulting in Takotsubo cardiomyopathy. We report on three patients with unique presentations of immersion pulmonary edema with associated Takotsubo cardiomyopathy. All three cases occurred in O‘ahu, Hawai‘i and were seen by the same cardiologist within a span of seven years. Each patient was scuba diving with sudden dyspnea with pulmonary edema on chest X-ray. Cardiac catheterization revealed no significant epicardial stenosis. Wall motion abnormalities resolved. EKG’s showed typical evolution of symmetric T wave inversion. Immersion pulmonary edema and Takotsubo cardiomyopathy may occur together and may be more common than initially thought. Dyspnea has been long known to be stressful as in “waterboarding.” Stressful events are known to trigger Takotsubo cardiomyopathy. Takotsubo cardiomyopathy should be considered as a possible complication of immersion pulmonary edema and EKG’s, troponins, echocardiogram and in the appropriate situation cardiac catheterization should be considered.

Conflict of Interest
The authors report no conflict of interest.

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