

Drowning

Each year both children and adults lose their lives in water accidents from drowning. Media reports continue to use the terms ‘near drowning’, ‘dry drowning’, and ‘secondary drowning’ which cause fear due to incorrect terminology. There is no medical condition or physical cause directly related to drowning that would cause death days after a drowning incident.

The medical definition of drowning is “the process of experiencing respiratory impairment from submersion/immersion in liquid.” Drowning has three outcomes: fatal drowning, nonfatal drowning with injury or illness, and nonfatal drowning without injury or illness.¹

There are no medical conditions known as ‘near drowning’, ‘dry drowning’, or ‘secondary drowning’.

Fatal drowning is described as death caused by submersion in or the inhalation of water causing the victim to suffocate.

Non-fatal drowning is much more common than fatal drowning. When fluid, usually water, enters the lungs, even a very small amount, it interrupts surfactant which lines the cells in the lung and is responsible for exchanging oxygen and other gases. After an apparent mild drowning, inflammation and infection in the lung can cause the initial symptoms to become worse and even progress to respiratory failure.

¹ Biernes, J, Definition of Drowning: A Progress Report, Drowning 2e, Berline: Springer, 2014

After a drowning incident, patients should seek medical care if they have any respiratory symptoms worse than the experience of a drink going down the wrong pipe at the dinner table or severe coughing that does not resolve in minutes. Patients who have drowned and have minimal symptoms will get better or worse within 2 to 3 hours. Usually patients can be observed for 4 to 6 hours in the emergency department and can be released if normal.

Drowning deaths do not occur due to unexpected deterioration days to weeks later without preceding symptoms. A drowning patient who initially appears normal but develops respiratory symptoms or altered mental status more than eight hours after the event, should seek care. The physician should consider other diagnoses than primary drowning in these patients. Other diagnoses to be considered include spontaneous pneumothorax, chemical pneumonitis, bacterial or viral pneumonia, head injury, asthma, heart attack, or other serious injury.

The American College of Osteopathic Emergency Medicine (ACOEP) defines drowning in three ways – fatal drowning; non-fatal drowning with injury or illness, and non-fatal drowning without injury or illness.

The ACOEP urges the media and public abandon the use of the terms ‘near drowning’, ‘dry drowning’, and ‘secondary drowning’ when speaking, or writing about the medical sequelae of drowning as these are not actual medical terms and often lead to confusion.

Drowning is a leading cause of preventable pediatric death. Prevention is the most important tool for treating drowning. Such prevention includes swimming lessons, touch supervision for toddlers, use of lifejackets, appropriate pool fencing, and continuous, undistracted supervision while a child is in the water.