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Arterial Gas Embolism

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Synonyms

[Arterial air embolism](#)

Definition

Arterial gas embolism refers to the obstruction of an arterial (oxygen-rich) blood vessel caused by gas bubbles forming within or entering into the blood vessel. The effect can be devastating in cases where the gas bubbles are sufficient to cause ischemia (lack of blood flow) to a vital organ such as the heart or brain. Common causes include lung trauma and severe decompression

sickness as a result of ascending rapidly from a dive or to a high altitude. Symptoms may consist of loss of consciousness, altered mental status, seizures, and extremity weakness, with the risk of complications such as kidney failure, cardiac arrest, brain injury secondary to oxygen deprivation, and death. Treatment begins with immediate administration of 100% oxygen, followed by the use of a recompression chamber (Bove [2015](#)).

See Also

► [Decompression Sickness](#)

References and Readings

Bove, A. A., MD, PhD. (2015, Oct). Arterial gas embolism. Retrieved January 24, 2017. From <http://www.merckmanuals.com/professional/injuries-poisoning/injury-during-diving-or-work-in-compressed-air/arterial-gas-embolism>