A comprehensive review of malignant hyperthermia: Preventing further fatalities in orthopedic surgery.

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Abstract

Most frequently associated with orthopedic surgery, malignant hyperthermia is a rare genetic condition linked to volatile anesthetics and succinylcholine. If not treated quickly with appropriate measures, death may result. To aid in the prevention of further fatalities, this review seeks to educate clinicians and staff on the presentation and treatment of this disease, as well as to provide a comprehensive overview by further addressing prevalence, similar conditions, pathogenesis and other aspects. Although the number of deaths due to malignant hyperthermia has greatly declined in the last several years, increased knowledge may eliminate associated mortalities, particularly in the orthopedic setting.

KEYWORDS: Core myopathy; Dantrolene; Malignant hyperpyrexia; Malignant hyperthermia; RYR1 pathology