Pre-bout Hypertension in the Combat Sports Athlete: Clearance Recommendations. A Position Statement from the Association of Ringside Physicians

Kevin deWeber

Program Director, SW Washington Sports Medicine Fellowship, Vancouver, WA Oregon Health and Science University, Portland, OR University of Washington School of Medicine, Seattle, WA

Ken S. Ota O Longevity & Wellness, PLLC, Scottsdale, AZ

Cicely A. Dye Department of Cardiology, US Naval Medical Center, Camp Lejeune, NC

Position Statement Abstract

Hypertension is one of the most prevalent medical disorders in the world and is associated with significant cerebrovascular and cardiovascular morbidity. Pre-bout blood pressure (BP) elevation is extremely common, and ringside physicians must accurately assess the accompanying risk of adverse cerebrovascular and cardiovascular events in the decision to allow participation in combat sports. It is strongly recommended that a ringside physician consider disqualifying a combat sports athlete with severe pre-bout hypertension (systolic BP ≥160 mm Hg and/or diastolic BP ≥100 mm Hg) from that bout, should it persist despite rest and repeat evaluation with accurate equipment. This recommendation is congruent with that of the American College of Sports Medicine, American College of Cardiology, and American Heart Association, which recommend non-clearance for sports or exercise testing when BP exceeds those thresholds. Severely elevated BP, as defined above, confers markedly increased risk of morbidity and mortality. Exercise further raises BP markedly. The combination of severely elevated blood pressure and cranial trauma during combat sports is a risk factor for intracranial hemorrhage with a direct impact on the morbidity and mortality associated with ringside combat sports events. Combat sports athletes with SBP ≥130 or DBP ≥90—and their coaches and families, if available and the athlete consents—should be educated on the causes of hypertension, its acute and chronic risks, and the possible future implications for bout clearance, and the fighters should be referred for evaluation and management.

Qualifying Statement

This Position Statement abstract is part of a comprehensive manuscript that is under editorial review by the *Clinical Journal of Sports Medicine*. Rules for publication stipulate that it can only be published in abstract form prior to and during editorial review. When the full manuscript is published in a journal, it will be accessible in its entirety.

This Position Statement (full manuscript) was approved unanimously by the Association of Ringside Physicians Board of Directors on 21 January 2021. Members at the time of approval included Kevin deWeber (lead author), Donald Muzzi, John Neidecker, Richard Weinstein, Nitin Sethi, Bradford Lee, Gerard Varlotta, Warren Wang, Louis Durkin, Nicholas Rizzo, Randa Bascharon, Larry Lovelace, and Edward Amores.