

MEDICAL CLEARANCE OF OLDER FIGHTERS: POSITION STATEMENT OF THE ASSOCIATION OF RINGSIDE PHYSICIANS

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The participation of older athletes (40 years and older) is increasingly common in combat sports. These athletes have unique age-related physiological changes that must be considered when assessing safety of participation in combat sports, which carry high risk of neurological, orthopedic, and ophthalmological injuries. The following guidelines from the Association of Ringside Physicians (ARP) provide a framework for approaching pre-competition medical clearance to prevent serious or catastrophic injury and illness.

Key Concepts and Guidelines

1. Medical clearance of older athletes for combat sports should be done in the context of their current medical status and physical conditioning, regardless of past athletic achievements.
2. To determine Cardiovascular fitness to fight:
 - a. ECG is recommended at initial licensing and annually.
 - b. Blood pressure greater than 160/100 mm Hg is disqualifying from vigorous exercise and competition until better controlled.
 - c. If any other cardiovascular concerns are raised from history or physical examination, athletes should be referred to Cardiology for additional testing and medical clearance.
3. To determine Brain fitness to fight:
 - a. MRI of the brain with susceptibility weighted imaging (SWI) or gradient echo imaging (GRE) is recommended at initial licensing and every 3 years
 - b. MR Angiogram of the brain at initial licensing
 - c. Neuropsychological (neurocognitive) evaluation at the time of the initial licensure and every 3 years thereafter
 - d. Referral to a neurologist or neurosurgeon with TBI experience any time there is concern for neurocognitive decline.
4. Older athletes may be at increased risk of adverse effects from repeated weight cycling and should be counseled regarding on proper nutrition and hydration for training and competition.

Development of this Position Statement

The ARP is an international, non-profit organization dedicated to the health and safety of athletes in combat sports. This position statement expresses a collaborative effort among the authors, subject matter experts, ARP Board of Directors, and Emeritus Board. An extensive literature search including, but not restricted to MEDLINE, Cochrane Review, and non-indexed peer-reviewed scientific articles published in online medical journals was performed using search terms: boxing, MMA, combat sports, older athlete, high-risk com-

batant, medical clearance, physiological changes, neuroimaging, cardiovascular risk assessment, orthopedic injury. Though studies evaluating older athletes in combat sports are lacking, common sense principles, extrapolation from related research, and decades of combat sports medical experience form the foundation for these rational recommendations.

The entire document is under editorial review for publication in a peer-reviewed medical journal and is therefore not available for review currently due to copyright restrictions.