SUMMARY

CARE OF THE OLDER FIGHTER

Position Statement of the Association of Ringside Physicians

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"Older fighters" are defined as combat sports athletes older than 35 years, based on heightened medical risks and historical classification. Age-related changes to the neurological, cardiopulmonary, endocrinological, thermoregulatory, osmoregulatory, and musculoskeletal systems increase these athletes' risks for injury and may prolong their recovery. These age-related risks warrant special considerations for competition, licensure, prefight medical clearance, in-fight supervision, post-fight examination, and counseling regarding training practices and retirement from combat sports. Neurological considerations include increased risk of intracranial lesions, intracranial hemorrhage, and sequelae from traumatic brain injury (TBI), warranting more comprehensive neurological evaluation and neuroimaging. Increased risk of myocardial ischemia and infarction warrant careful assessment of cardiac risk factors and scrutiny of cardiovascular fitness. Older fighters may take longer to recover from musculoskeletal injury; post-injury clearance should be individualized.

Detailed recommendations are as follows:

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. Neurological recommendations for athletes 35 and older:
    a. MR-angiogram (or CT-angiogram) and MRI of the brain with susceptibility weighted imaging (SWI) or gradient echo imaging (GRE) are recommended at initial licensure. When MRI is not feasible, CT-angiogram is acceptable.

    b. MRI (or CT-angiogram) is recommended every 3 years following licensure, and when clinically indicated.

    c. Neuropsychological evaluation is recommended at initial licensure and every 3 years thereafter, and when clinically indicated.

    d. Refer athletes to a neurologist or neurosurgeon with TBI experience if there is concern for neurocognitive decline.

3. Cardiovascular recommendations for athletes 35 and older:
    a. Annual medical screening should include the AHA 14-point cardiovascular evaluation (see below).
    b. ECG is recommended at initial licensure and annually for athletes 35 and older.
    c. Blood pressure greater than 160/100 mm Hg is disqualifying from vigorous exercise and competition until better controlled.
    d. If any other cardiovascular concerns are raised from history, physical examination, or ECG, athletes should be referred to a cardiologist for additional testing and medical clearance.
4. Orthopedic recommendations:
    a. Older athletes should be encouraged to reacquire a high level of muscular strength and endurance before being allowed to compete in combat sports.
    b. Athletes with osteoporosis should be discouraged from combat sports competition.
5. Endocrine recommendations:
    a. Athletes using testosterone supplementation should be monitored for therapeutic levels and adverse effects and be counseled on the adverse effects of supraphysiologic dosing.
6. Thermoregulatory recommendations:
    a. Athletes should be closely observed during training for signs of heat illness and encouraged to rehydrate regularly.

American Heart Association's 14-point cardiovascular evaluation.

Personal Medical History

1. Exertional chest pain/discomfort.
2. Exertional syncope or near-syncope.
3. Excessive exertional and unexplained fatigue; fatigue associated with exercise.
4. Prior recognition of a heart murmur.
5. Elevated blood pressure.
6. Prior restriction from participation in sports.
7. Prior testing for the heart ordered by a physician.

Family Medical History

8. Premature death—sudden and unexpected before age 50 due to heart disease, in one or more relatives.
9. Disability from heart disease in a close relative < 50.
10. Specific knowledge of certain cardiac conditions in family members: hypertrophic or dilated cardiomyopathy, long-QT syndrome or other ion channelopathies, Marfan syndrome, or clinically important arrhythmias.

Physical exam

11. Heart Murmur-exam supine and standing or with Valsalva, specifically to identify murmurs of dynamic L ventricular outflow tract obstruction.
12. Femoral pulses to exclude aortic stenosis.
13. Physical stigmata of Marfan syndrome.
14. Brachial artery blood pressure (sitting, preferably taken in both arms).

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