

Cardiopulmonary Exercise Testing in Cancer Patients: Should We Really Refrain From Considering It for Preparticipation Screening?

We read with great interest the recently published article by Kenjale et al. [1], in which the authors conclude that cardiopulmonary exercise testing (CPET) is not required for clearance in the majority of cancer patients prior to participation in exercise training programs.

We appreciate the authors' observation that the risk of an exercise-induced event during CPET in adult cancer patients is very low, and the identification of population-specific risk factors for positive tests is both novel and valuable [1]. We disagree, however, with the conclusion that CPET is not required in preparticipation health screening for the vast majority of cancer patients. The benefit of a pre-exercise participation health screening test should ideally be evaluated by assessing the number of serious adverse events (SAEs) during subsequent vigorous physical activity, as previously reported by others [2]. SAEs during CPET can serve only as a rough estimate of what might happen during subsequent exercise sessions because the exercise recommendation is based on the screening. In addition, the CPET provides several advantages not considered by the authors. The objective measurement of patients' physical fitness allows training effects to be monitored through repeated tests [3], tailoring of the intensity prescriptions to avoid strain that is too low or too high [4–6], and improved patient self-confidence and compliance through the exclusion of elevated risks.

As a last remark, the number of subjects observed in the present study is relatively low. If the expected rate of SAEs during CPET is ~0.5 per 100,000 tests (healthy individuals) or 2–5 per 100,000 tests (patients with cardiovascular diseases) [1], 413 analyzed tests appears insufficient to conclude that the findings are consistent with other work in noncancer clinical populations.

We suggest that CPET should continue to be taken into consideration when screening cancer patients for participation in exercise training programs and that the benefits of CPET for cancer patients are better examined through longitudinal rather than cross-sectional studies.

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Disclosures

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