leg exercise. Individuals who are untrained for arm work have been shown to demonstrate a lower lactate threshold as well as an increase in rate of lactate release as compared with trained individuals for cycle ergometry (Pendegast et al, 1979). The resultant early disruption of homeostasis may be attenuated for untrained individuals performing incremental arm ergometry using an accelerated incremental protocol such as that used by Walker et al (1986). One would expect to find that the moderately aerobically trained subjects in the present study to have increased oxidative enzyme activity, higher myoglobin concentration, higher mitochondrial density (Holloszy and Booth, 1976), and increased vascular bed capillarisation (Saltin, 1977) in the exercising muscle. The result may be a lowered glycolytic flux at any given work rate and enhanced lactate clearance. Thus, the accelerated cycle ergometry protocol may not have been as advantageous to this subject pool in order to achieve a higher peak VO2. The possible interaction between state of training and test protocol warrants further investigation.

Although the proposed JMT protocol to determine peak oxygen consumption offers a time saving advantage when compared to the total time of test administration involved in the DT and CT (Table I), the JMT presents a disadvantage in that it does not allow for accurate determination of the anaerobic threshold or the ventilatory threshold. Further, the proposed JMT would not seem appropriate for patients with heart or lung disease since this protocol may not provide the slow work rate progression often required for clinical cardiopulmonary assessment (Buchfuhrer et al, 1983).

In any experiment designed to compare exercise protocols for cardiopulmonary assessment, it is essential that the experimental design employ a set of “fix J criteria” to determine peak VO2 and a highly motivated subject pool. The present experiments met both of the above criteria. First, all but two of the subjects reached the established criteria for peak VO2 on each of the individual tests. The two subjects who failed to meet the established criteria were retested and both obtained the required peak VO2 criteria upon the second test. Secondly, the nine subjects chosen for study were highly motivated individuals. Hence, it seems unlikely that the results obtained in the present experiments were due to a lack of sustained subject commitment.

In summary, these data do not support the notion that the proposed JMT elicits a higher peak VO2 during cycle ergometry than the continuous or discontinuous tests studied. However, the JMT does save time while achieving similar results. Therefore, it appears that the proposed JMT might be particularly useful in studies requiring determination of peak VO2 in large numbers of subjects.

References

ERRATA

Details of two texts reviewed in 21:3 were incorrectly recorded. The correct information is as follows:

We apologise for these errors.

Eds.

In Dr Lorna Fisher's review in BJSM 21:3 p. 144 a line was inadvertently omitted, which altered the meaning substantially. The first paragraph should therefore read—

This book is well written and presented with clear headings, tables and illustrations. It is also very well referenced. The authors have tried to address the problem of non-articular and non-inflammatory soft tissue rheumatic disorders. Reference is made to inflammatory conditions when these need to be considered in the differential diagnosis. A very relaxed interpretation of what constituted "soft tissue" has allowed the inclusion of conditions such as osteochondritis, osteomalacia and osteoporosis. Conversely, virtually no mention is made of metabolic and endocrine causes of soft tissue rheumatic pain.

We apologise for this error.

H. E. Reboe

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