Top Ten Things To Know
CPX in Adults

1. An educational guidance document for cardiologists to apply CPX appropriately in exercise testing laboratories.

2. Modern CPX systems allow for the analysis of gas exchange at rest, during exercise and recovery, and yield breath-by-breath measures of oxygen uptake (VO2), carbon dioxide output (VCO2) and ventilation (VE).

3. VO2 max is an important independent predictor of survival for patients with and without clinical cardiovascular disease (CVD).

4. CPX variables are reviewed and explained for the diagnostic and prognostic assessment of patients.

5. Not only standard applications are described, but emerging applications of CPX variables and their clinical relevance are introduced.

6. CPX can assist clinicians in the diagnosis and management of patients with a wide variety of CVD and applications such as: congenital heart disease, pulmonary hypertension, ischemic heart disease, evaluation of pacemaker function, arrhythmias, preoperative evaluation for pulmonary resection and bariatric surgery.

7. Despite the fact that exercise testing has been available for more than a half century and, like many other cardiovascular procedures, it has evolved in its technology and scope, instruction in CPX is not a regular component of fellowship training programs in cardiology.

8. As a result many clinicians do not adequately understand the clinically important information provided by CPX, and the technique remains underutilized.

9. CPX requires expertise in the use of specialized equipment and in the interpretation of the data.

10. The structure, methods and components of the CPX final report and its features are described in this guidance document.

Balady GJ, et al; on behalf of the American Heart Association Exercise, Cardiac Rehabilitation, and Prevention Committee of the Council on Clinical Cardiology; Council on Epidemiology and Prevention; Council on Peripheral Vascular Disease; and Interdisciplinary Council on Quality of Care and Outcomes Research. Clinician’s guide to cardiopulmonary exercise testing in adults: a scientific statement from the American Heart Association. Circulation 2010: published online before print June 28, 2010, 10.1161/CIR.0b013e3181e52e69.

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