

A SNAPSHOT OF CPET PRACTICES IN ANZSRS LABORATORIES

Josh Stanton, Paul T Kelly, Kathryn Wilson and Maureen P Swanney
Respiratory Physiology Laboratory, Christchurch Hospital, Christchurch, New Zealand

Introduction: The selection of normal reference values for use in the evaluation of cardio-pulmonary exercise testing (CPET) results is critical to any interpretative scheme. Prior to standardisation discussions within ANZSRS we need to investigate current practice in local respiratory laboratories.

Aim: Investigate the current CPET practices in ANZSRS laboratories.

Method: We posted a questionnaire on CPET practices on the ANZSRS web-site October - November 2005. The survey included equipment, the mode of exercise, workload protocols, and reference equations used by each laboratory. The analyses of responses are presented as frequency.

Results: Twenty-six laboratories responded to the survey, 16 conduct CPET.

Procedures	n	Reference values					
Ergometer	11	VO₂	n	V_Emax	n	V_I @ max exercise	n
Treadmill	1					Jones 1985	2
Both	4	Wasserman	5	MVV	1	Jones 4 th Ed.	1
Incremental	12	Jones 1983	2	FEV ₁ X 35	3	Blackie	1
Ramp	3	Jones 1985	4	FEV ₁ X 40	5	40 – 60% of VC	1
Not stated	1	Jones 4 th Ed.	2	Wasserman	2	No value used	11
Exercise FVL	11	Fairbairn 1994	1	Jones 1985	1	MVV	n
Not done	5	Hansen 1984	1	Gandevia	1	Measured	1
Exercise ABG	1	Not stated	1	Carter	1	Estimated	14
Not done	15			Other	2	Both	1

Conclusion: There is a wide variation in exercise testing practices within Australia and New Zealand. In the future, if we pool exercise data collected on ‘normal’ subjects to validate reference equations, standardisation of CPET procedures is required.

Key word: Exercise, CPET, reference equations, workload.