

Prevalance of Exercise Induced Bronchoconstriction Among The Athletes of University Of Malaya

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Background

Exercise induced bronchoconstriction (EIB) is airway narrowing that occurs during or after strenuous exercise. EIB occurrence is common in western countries due to low humidity with cold climate. Athletes need to be educated about EIB as it potentially impedes performance. EIB prevalence among Malaysian athletes remain unknown. Thus, this study is to determine the prevalence of EIB among University of Malaya (UM) athletes

Methodology

This study was done in the exercise performance laboratory of Sports Centre UM and all subjects were at least represent UM in their respective sports. Total of 109 subjects were recruited, age from 18-32 years old. Exercise challenge test was chosen for the screening tools in this study. They were need to do baseline forced expiratory volume in one second (FEV1) before the test as baseline. They ran on the treadmill until their heart rate (HR) achieve 85-90% of HR maximum and continue the same intensity for 6 minutes and then stopped. FEV1 were measured at 5,10,15,20,25 and 30 minutes after the completion of the exercise. Reduction of FEV1 more than 10% from baseline in either reading is consider a positive result.

Results

Seventeen out of 109 subjects were positive for EIB which accounted for 15.6%.

Conclusion

EIB is prevalent among UM athletes. Further study for national athletes is recommended.