

European Respiratory Society Annual Congress 2013

Abstract Number: 4255

Publication Number: P1925

Abstract Group: 4.1. Clinical respiratory physiology, exercise and functional imaging

Keyword 1: Exercise **Keyword 2:** Respiratory muscle **Keyword 3:** Physiology

Title: Neural respiratory drive is preserved during high intensity exercise

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Body: It is unknown whether neural inhibition of respiratory drive occurs during exhaustive exercise. We hypothesised that neural inhibition did occur; to test the hypothesis we measured diaphragm EMG from a maximal inspiratory capacity maneuver (EMG_{di-IC}) at rest and during exercise. EMG_{di-IC} was measured before and after the plateau phase of the diaphragm EMG in eleven healthy adults undertaking exercise at 60% and 80% of maximal workload achieved from incremental exercise. The mean EMG_{di-IC} at rest was $65\% \pm 16\%$ of the maximum that could be obtained from a battery of inspiratory tasks. Before and after the plateau phase of diaphragm EMG, EMG_{di-IC} was $68\% \pm 13\%$ and $72\% \pm 12\%$ ($p > 0.05$) during 60% of the maximum workload, and was $70\% \pm 13\%$ and $78\% \pm 13\%$ ($p > 0.05$) during 80% of the maximum workload achieved on an incremental test. Our data show that exercise condition does not reduce the magnitude of EMG_{di-IC} . This argues against neural inhibition as feature of exercise in healthy adults.