

GINGER ROOT POWDER FOR THE PREVENTION OF AIR SICKNESS: A RANDOMIZED CONTROL TRIAL

POUDRE DE RACINE DE GINGEMBRE POUR LA PRÉVENTION DE LA MALADIE DE L'AIR: UN ESSAI DE CONTRÔLE RANDOMISÉ

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Introduction: Airsickness is a common problem affecting aircrew. Among trainee pilots, 30-40% become airsick in their first air experience. Drowsiness as an adverse effect of most anti-motion sickness drugs precludes their use in aviation. A new approach to prevention of airsickness symptoms incorporates the use of ginger root (*Zingiber officinale*) powder along with physical exercise therapy and progressive muscle relaxation.

Methods: Subjects (n=21) were randomly allocated into two groups; test (n=11) and control (n=10). The test subjects were administered 1g ginger root powder (*Zingiber officinale*) mixed with pulverised glucose everyday 4h prior to exposure to the provocative stimulus. The controls were given plain pulverized glucose powder. Subsequently, the subjects underwent yogic exercises, physical exercise therapy and progressive muscle relaxation, followed by exposure to gradually increasing provocative motion on the Barany chair. The subjective response to each provocative motion was assessed using the Motion Sickness Assessment Questionnaire (MSAQ). Overall motion sickness scores and specific scores for 4 different dimensions of motion sickness were calculated and compared between the subjects and controls. Mann Whitney U test, a nonparametric test, was utilized to compare the scores.

Results: The subscale scores for all the four dimensions of motion sickness were found to be lower in the test group as compared to the control group. The overall motion sickness scores were also found to be lower in the test group.

Conclusion: Ginger root powder can be safely introduced as a modality of supportive treatment for the prophylaxis of air sickness.