ASPECIFIC NASAL HYPERREACTIVITY IN AN AIR FORCE POPULATION AND ITS RELATIONSHIP WITH BRONCHIAL HYPERREACTIVITY (AH).

INTRODUCTION: Nasal function is of paramount importance for aircrew. Aspecific nasal hyperreactivity (AH) prevalence in a young AAF population was investigated and compared to the prevalence of specific bronchial hyperreactivity (ABH) in the same population. ABH, defined as a positive reaction to histamine, methacholine, or exercise and nasal provocation tests, was evaluated in a control group. RESULTS: 25% of these 31 aviators had nasal allergy. In the control group, the prevalence of nasal allergy was 8.3%. CONCLUSIONS: Nasal hyperreactivity is a common condition in aviators and may be associated with ABH.

N95-16752

EFFECT OF ANTHROPOMORPHIC BEDREST (BR) ON GASTROINTESTINAL MOTILITY (GIM) OF NORMAL SUBJECTS. L. Patchett*, R.C. Tintner*, K.J. Tipte*, N.M. Cintie*, University of Alabama at Huntsville, N95-16753

INTRODUCTION: The effect of BR on GIM was evaluated from the MCTT of LAC. The combined effect of changes in fluid shifts and autonomic changes associated with the absence of the gravitational vector may decrease GIM during space flight. GIM can be estimated from the mouth-to-cecum transit time (MCTT) of orally administered lactulose (LAC). This test is used to assess changes in GIM in normal persons and in patients with gastrointestinal and cardiovascular abnormalities. Since BR mimics some of the physiological changes that occur during space flight, the effect of ten days of BR on GIM was evaluated from the MCTT of LAC.

METHODS: 12 normal males between the ages of 35 and 50. After an 8 h fast, 20 subjects ingested Cephulac® (20 g solution) with a low-fiber breakfast on four different days (45, 70, 25, and 20) before BR and on three separate days (4, 7, and 10) during BR. Breath-H₂ concentrations were measured before and at 10-min intervals for 4 h after breakfast using a Quintron breathalyzer. The effect of ten days of BR on GIM was estimated from the MCTT of LAC. GIM can be estimated from the mouth-to-cecum transit time (MCTT) of orally administered lactulose (LAC). This test is used to assess changes in GIM in normal persons and in patients with gastrointestinal and cardiovascular abnormalities. Since BR mimics some of the physiological changes that occur during space flight, the effect of ten days of BR on GIM was evaluated from the MCTT of LAC.

RESULTS: The combined effect of changes in fluid shifts and autonomic changes associated with the absence of the gravitational vector may decrease GIM during space flight. GIM can be estimated from the mouth-to-cecum transit time (MCTT) of orally administered lactulose (LAC). This test is used to assess changes in GIM in normal persons and in patients with gastrointestinal and cardiovascular abnormalities. Since BR mimics some of the physiological changes that occur during space flight, the effect of ten days of BR on GIM was estimated from the MCTT of LAC. The combined effect of changes in fluid shifts and autonomic changes associated with the absence of the gravitational vector may decrease GIM during space flight. GIM can be estimated from the mouth-to-cecum transit time (MCTT) of orally administered lactulose (LAC). This test is used to assess changes in GIM in normal persons and in patients with gastrointestinal and cardiovascular abnormalities. Since BR mimics some of the physiological changes that occur during space flight, the effect of ten days of BR on GIM was estimated from the MCTT of LAC.

CONCLUSIONS: The combined effect of changes in fluid shifts and autonomic changes associated with the absence of the gravitational vector may decrease GIM during space flight. GIM can be estimated from the mouth-to-cecum transit time (MCTT) of orally administered lactulose (LAC). This test is used to assess changes in GIM in normal persons and in patients with gastrointestinal and cardiovascular abnormalities. Since BR mimics some of the physiological changes that occur during space flight, the effect of ten days of BR on GIM was estimated from the MCTT of LAC.

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THE EFFECTS OF LYPSIN ON HEMODYNAMIC RESPONSES TO HEAD-DOWN TILT AND ORTHOSTATIC STRESS. D. E. Ward* and R. W. Gross**

INTRODUCTION: This study was conducted to determine the effects of the synthetic drug lysine-8-asparagine (lypsin) on specific hemodynamic variables during nascent (4 h) head-down tilt (HTD) and subsequent orthostatic stress. METHODS: Seven healthy male subjects, ages 23-30, were studied in a blinded, cross-over study of lypsine versus the control, normal saline (NaCl). Arterial and central venous pressures were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study. Arterial blood pressure was measured by an elastic cuff placed on the brachial artery. Hemodynamic variables, including heart rate, systolic and diastolic blood pressures, pulse pressure, and cardiac output, were monitored throughout the study.

CONCLUSIONS: The results of this study suggest that lypsine may be useful in the prevention and treatment of orthostatic hypotension.