

EVALUATION OF PHYSIOLOGICAL TRAINING IN ROMANIA MADE BY EXPERIENCED PILOTS

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Abstract:

Introduction: The physiological training in Romania takes place in The National Institute of Aeronautical and Space Medicine and it is meant to familiarize pilots with the challenges and impact of aerial environment on human body. Comprehension and retention of this elements lead to flight enhancement and decreasing of aviation incidents caused by human factor.

Methodology:

Training curricula is briefly presented. Data collection formulary is presented. *Results and discussions:* The mean grade for evaluation was 9.60 for theory part and 9.40 for practical part, rather uniform for the five years period. The main issues found were attributed to optimizing theory delivery, altitude chamber upgrade and simulation optimization. Some were solved, others are improving (chamber) and some will not be implemented due to safety (prolonged hypoxic exposure). The subject less encountered during flight practice (night vision and G training) rose the most apprehension problems. *Conclusion:* Although perfectible, the Romanian physiological training process is adequate to its scope and capable of modern military aviation challenges. Continuous improvement of both instructors and pilots is necessary for maintaining this capability.

Keywords: physiological training, evaluation, implementation

OPERATIONAL PSYCHOLOGY, AN EMERGING NEW DISCIPLINE

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Summary

If operational medicine is a medicine applied in the specific conditions of military missions, military psychology is largely an operational psychology. This means that both medicine and psychology permanently take into account the special characteristics of the military environment (isolation, limited resources, risk) and their common purpose is to maintain human resources in a state of operability. The persons participating in specific military missions for which they are trained may require, sometimes, medical and/or psychological help. Operational psychology should therefore focus on the concept of operational stress, which is a type of occupational stress (workrelated stress in general) with reference to military professions. The objective of this paper is to underline the transition from “traditional” interests of military psychology to a new paradigm named “operational psychology”. Thus, in addition to medical assistance, psychological intervention is a complementary part of occupational health in the military environment.

Keyword: operational psychology, military psychology.

EATING DISORDERS IN PATIENTS WITH SLEEP APNEA

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Abstract

INTRODUCTION: Eating disorders (nutrition disturbances related to somatic and psychological factors) are highly prevalent in military employees (60%), but often difficult to assess. Nocturnal eating (NE) relates to genes regulating sleep and nutrition, modulated by environmental factors (occupational stress, shift work, obstructive sleep apnea syndrome OSAS). **AIM:** Starting from individual testimonies, we aimed to evaluate NE in military employees with OSA.

MATERIAL, METHODS: 98 professionally active patients with OSAS confirmed by nocturnal polygraphy were assessed for eating disorders, anxiety and sleepiness, using the Three Factor Eating Questionnaire (TFEQ), the Binge Eating questionnaire (BEQ), the Beck Anxiety Inventory (BAI), and the Epworth Sleepiness Scale (ESS).

RESULTS: 89 (90.8%) of the patients presented moderate or severe OSAS. Of those, 61 (68.6 %) presented NE, with more than half of the caloric intake/24 h after dark. In 18 of the 61 patients with NE (29.5%), there were features of binge eating, with self-induced vomiting. In 15 of them (24.6%), there was alcohol consumption during the episode (more than 3 units) and 12 of them (19.6%) presented amnesia of the episode. The level of occupational induced anxiety correlated with the daytime sleepiness better ($r = 0.69$) than the severity of OSAS ($r = 0.54$).

CONCLUSIONS: There is an important proportion of military employees with eating disorders and OSA. The importance of this study regards daytime dysfunction in these patients, with multifactorial components and interdisciplinary management.

PILOT SPECIFIC PERSONALITY

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Summary:

Over the years since aeronautical psychology has emerged, psychologists have tried to identify whether pilots have a different personality than other occupational categories and which are the personality traits in addition, the different traits or the more accentuated features necessary for proper functioning pilot psychology. This study identifies a number of 24 personality traits needed by a pilot to conduct missions in a safe and secure manner, without any psychological problems, disfigurement, or loss of motivation.

Keywords: personality traits, pilots

RAMSAY-HUNT SYNDROME ASSOCIATED WITH CLEAR

LIQUID MENINGITIS

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Abstract

There are presented two clinical cases of Ramsay Hunt syndrome associated with zosterian meningitis - at military personnel. The onset of the disease was in one case with meningeal syndrome and in the second case, with otic onset followed by meningitis, with the delay of diagnosis. Both cases evaluated favourable under therapy with Acyclovir and antiedematous drugs.

ODONTOGENIC MAXILLARY SINUSITIS-CLINICAL CASE. MEDICAL-AERONAUTICAL IMPLICATIONS

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Abstract

The maxillary sinus is defined as a cavity that is located in the jaw bone, located paramedian by the nasal passages above both upper and lower premolars and molars apices and inferior by the of the orbit floor. It has the shape of a triangular pyramid with the tip laterally oriented towards the zygomatic bone. It has five walls (superior, anterior, inferior, posterior and medial). The natural ostium, is located in the middle nasal meatus which allows to drainage the sinus secretions.

Odontogenic maxillary sinusitis represents the inflammation of the maxillary sinus mucosa, installed consecutively after a tooth infection and requires an outbreak of sinus teeth infection. Odontogenic maxillary sinusitis is determined by the existence of a communication between the oral cavity and the sinus, consecutive after a sinus tooth extraction or both pushing a tooth or a root during the extraction into the sinus, incorrect fillings of the sinus teeth channels, apical periodontitis at the sinus teeth, superinfection of radicular or follicular cysts, alveolar bone osteitis consecutive complication from dental implants.

The aim of the paper is to present the protocol that we use in investigating and treatment of the odontogenic maxillary sinusitis.