

1. NEW METHODS OF TESTING THE SUBSTANCES WITH ANTIMICROBIAL ACTIVITY – AEROSPATIAL IMPLICATIONS

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SUMMARY

Objective. Testing the antimicrobial activity of some amides new synthesized at the Faculty of Pharmacy in the context of a complex research project belonging to the CEEEX Program.

Material and method. At the Department of Microbiology belonging the INMAS Clinical Laboratory we have selected microbial strains and then we have tested their susceptibility to the 17 new amides synthesized and studied.

The testing was done initially using common laboratory methods as well as new, original methods which were developed in our laboratory: *The wells method* and *The Pseudo-wells method*.

Results. The results were studied using the stereomicroscope. The majority of studied amides evidenced an antimicrobial activity against gram positive germs and, also, against the fungi. Only one of the amides had an inhibitory activity against all the strains we used. We noticed a small number of amides with antimicrobial activity against Gram negative germs.

Conclusions. Even though their chemical structure is very much alike, the new synthesized amides developed a different inhibitory activity against the microbial strains. *The Pseudo-wells method* we imagined has proven to be the most efficient in testing the antimicrobial activity of the newly synthesized substances. This method is recommended by its own performances to be used in aerospace field researches.

Key words: amides; antimicrobial activity; original methods;

2. STATISTICAL BENCHMARKS REGARDING THE HEALTH SYSTEM IN ROMANIA

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SUMMARY

No matter what race, religion, political opinion, economic or social condition may be, health is a fundamental right for anyone. By the means of the political and legislative measures, as well as the public health programs, the Ministry of Public Health monitor the activity of the national health system in order to promote health, prevent from disease and improve life quality. Therefore, it is necessary to know the level and the dynamics of the demographic indicators, as well as those specific to the health system to identify regional shortages or gaps, and to provide efficiently funds.

Key words: health, life quality, demographic indicators, indicators specific to the health system

3. THERAPEUTIC PROTOCOLS - THE DETAILS OF THE PRESCRIPTION SULODEXIDUM

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SUMMARY

Have recently been published by the Ministry of Health treatment protocols for prescribing drugs corresponding to common international designations [1]. An interest held prescribing sulodexidum due to the vast pathology whom it is addressed, what we want to show in this article.

Key words: sulodexidum, therapeutic protocols

4. INTERVENTIONAL ULTRASONOGRAPHY

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SUMMARY

Ultrasonography is a very useful guiding method for various invasive techniques, representing one of the safest diagnostic and/or therapeutic alternatives. It needs only relatively reduced technical and material equipment.

Keywords: interventional ultrasonography, echographic guiding

5. EFFECTS OF STRESS IN BRAIN MORPHOLOGY: AN OVERVIEW

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SUMMARY

The brain is the key organ of the response to stress because it determines what is threatening and, therefore, potentially stressful, as well as the physiological and behavioral responses which can be either adaptive or damaging. Stress involves two-way communication between the brain and the cardiovascular, immune, and other systems via neural and endocrine mechanisms. Beyond the "flight-or-fight" response to acute stress, there are events in daily life that produce a type of chronic stress and lead over time to wear and tear on the body. The hormones associated with stress protect the body in the short-run and promote adaptation. The brain is a target of stress, and the hippocampus is the first brain region, besides the hypothalamus, recognized as a target of glucocorticoids. Stress and stress hormones produce both adaptive and maladaptive effects on this brain region throughout the life course. Early

life events influence life-long patterns of emotionality and alter the rate of brain. The hippocampus, amygdala, and prefrontal cortex undergo stress-induced structural remodeling, which alters behavioral and physiological responses.

Key Words: stress, depression, brain, hippocampus, neurons, glands.

6. THE TOPOGRAPHIC INVESTIGATION OF THE MEMORY AND THE ATTENTION AT THE AERONAUTICAL PERSONNEL

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SUMMARY

Memory and attention are two important psychic characteristics on people with aeronautical professions. Topographic memory reports on retaining of a topographic route for a certain time period of time and using this information for an established aim. Such a task includes spatial orientation, attention, cognitive processing, risk taking and so on. Attention is a mechanism of orientation, focusing and fixation of conscience on a specific object or task, question, problem. In contrast with state of wake, when cortex has a diffuse activation, and human being realizes a general and passive contemplation of the environment, state of vigilance supposes a general exploration of the medium, a waiting and looking for something not defined yet. This state has not a certain orientation, it doesn't stop on something clear – it only makes a scanning of the surrounding environment. Vigilance is an indicator of unexpected signal detection capacity which has a low-middle level of intensity.

The aim of this paper is to investigate these two psychological characteristics on a group of subjects with aeronautical professions.

Method and materials: topographic memory and vigilance tests applied on computer. The tests are parts from "PSISELTEVA" battery for psychological evaluation.

The results show a general image of investigated characteristics in tested subjects. Their utility consists in comparing between group of professions and between subjects with aeronautical professional background and subjects with no such an experience.

Key-words: attention, vigilance, topographic memory, learning capacity, visual and logical memory.

7. SCIENTIFIC EVENTS IN AEROSPACE MEDICINE IN 2009 „THE 80TH ANNUAL SCIENTIFIC MEETING OF AEROSPACE MEDICAL ASSOCIATION” - PART I -

Dragoş Vlad M.D., Adrian Macovei M.D.