

testing and personalized approach to the patients would reduce the cost of the treatment by reducing the incidence of DM.

Key Words: diabetes, genomics, candidate genes, metabolic syndrome

302. THE IMMUNE PROCESS IN THE PATHOGENESIS OF TUMORS

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Introduction: The immune process in the pathogenesis of the tumors represents an actual subject for the prevention and the treatment of the cancer, which frequency is decreasing while studying the newest theories of the etiopathology of cancer, a disease that is the common cause of death.

The objective of this study is to review the newest methods, that explain the role of the immune processes in the pathology and the treatment of tumors.

Material and methods: Informational support for the development of this publication has served a full amount of current national and international journals, which are concerned with tumors, found through the „PubMed” „Google” si „CrossRefMedlineWeb of Science”. After entering the filters: the immune process in the pathogenesis of tumors were selected 20 sources.

Results:After studying the interaction between the immune system and the tumors, different immunotherapies were identified: the new therapeutic monoclonal antibodies, that were approved by the Food and Drug Administration, as a standard treatment in some forms of cancer, Associated with trastuzumab for mamar cancer and rituximab for the B cells lymphoma, and the vaccines, which are starting to be used in clinical practice, either alone or in various combinations.

Conclusions: Much has been learned about the potential of the immune system to control cancer and the various ways that immunotherapy can boost the potential of the immune system for the benefit of the patient. This knowledge has stimulated the invention of many new therapeutic antibodies, cell-based treatments, and vaccines, which are starting to be used in clinical practice, either alone or in various combinations. These new therapies are expected to result in improved cancer treatment and, eventually, the prevention of cancer.

Key words: The hallmarks of cancer, the immunology of cancer, imunogenicity, immunosuppression, immunotherapies.

303. THE INFLUENCE OF EXPIRATION AND INSPIRATION DURATION ON RESPIRATORY HEART ARRHYTHMIA

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Objective. To study the effect of the duration of inhalation and exhalation, and their relation to the respiratory heart arrhythmia (RHA) and observe changes in vagal tone during the test

Methods 13 non-smoking subjects were selected (4 of them men) with an average age of 20 + \ - 2 years, they were all healthy, don't suffer of cardiac arrhythmia, not obese and don't take drugs, also don't drink caffeine-containing products for 4 hours before the experiment.

Procedure The subjects were instructed at first to breathe as usual, then quickly inhale (3seconds) and slow exhale (7 seconds) and vice versa. Breathing and heart rate were recorded using biopac. Also subjects underwent tests about their anxiety and the state of the autonomic nervous system by Spielberger, by Moldovanu

Results According to the results of tests were increased values for the state of nervous, cardiovascular and digestive systems, shortness of breath, tremor and tetany. 5 subjects overestimated all indicators. The breathing rate was 6\min. During the test with a short inspiration after a long expiration ($P = 0.00214$), RHA was higher than vice versa ($P = 0.000775$). The heart frequency in both experiments was 89 b\m. The correlation hf\lf bands in 3\7 experiment was 0,09 and in 7\3 experiment 0,083

Conclusions RHA amplitude is influenced by the respiration rate and the amount of air exchanged per breath. Reducing the frequency of breathing increases RHA. Inspire blocks vagal cardiac regulation. During the test with a short inspiration after a long expiration vagal tone and RHA, was higher than in a long inspiration after a short expiration. The experiment also showed that the correlation of hf\lf bands has no effect on heart rate variability.

Keywords: paced respiration, Respiratory sinus, arrhythmia, Biopac.

304. THE CHICK EMBRYO CHORIOALLANTOIC MEMBRANE AS A MODEL FOR STUDYING OF ANGIOGENESIS PROCESS

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Introduction: Cancer is the result of uncontrolled cell divisions, and angiogenesis processes are those that support and maintenance the tumor changes. Recently, the angiogenesis becomes one of the most studied physiological event due to the key role it plays in the pathogenesis of cancer as well because of its potential as a therapeutic target. To analyze the mechanisms underlying normal and pathological angiogenesis numerous angiogenic tests in vivo have been determined using different species of animals, including mammals, birds and fish. The range of biological studies in vivo of the angiogenesis allowed scientists to progress rapidly in highlighting of the action mechanism of multiple proangiogenic factors. The cost, simplicity, reproducibility, and credibility are the determinants that dictate the choice of method.

Discussion: Chick embryo chorioallantoic membrane (CAM) is a extremely vascularized extraembryonic membrane. It represents an accessible and inexpensive model in vivo, which is used