

expectation, language, differences in the training and practise in the situation when doctors and their patients often have very different cultural background, philosophy, understanding of illness and expectation from the medical system.

In the final part of the presentation the author will analyse some aspects of cultural globalisation and standards in evidence base medicine and reflect on the unique focus in psychiatry, on human experience and behaviour, in health, in disease, in culturally diverse, on the one hand and globalised, unitary aspects of society in the other.

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Dry sodium chloride aerosol (halotherapy) in the treatment of rhino sinusitis and asthma

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Introduction: Salt speleotherapy has a long history in Europe since 19-th century. Studies of the atmosphere of the speleoclinics and the mechanics of salt speleotherapy showed that the main factor, which improves health is the smallest airborne particles of natural rock salt – dry sodium chloride aerosol (DSCA) of a certain size and concentration. This fact has led to the idea of creating similar atmospheric conditions, which are more accessible to patients (pts).

Halotherapy (HT) is the result of adapting natural salt aerosol from salt caves to flexible usage in other locations. Curative effect of HT is caused by an air medium saturated with DSCA with predominance amount of particles of 1 to 5 μm in size and of a certain density range. HT is carried out in the premises equipped with medical facilities – dry salt aerosol generators (halogenerators) and control devices.

Material and methods: The randomized placebo study has lasted for 12 months. Controlled HT was evaluated in 115 pts with asthma. 60% of pts received a base medication without a full effect. DSCA with the dominating amount of 1 to 5 μm particles was produced by halogenerator ASA-01.3 (Aeromed Ltd.). Treatment was performed in a special room with salt coated walls. The pts breathed quietly while reclining in the chairs. The DSCA course comprised 15-20 daily 40-60 min procedures. The duration of each course and density of aerosol medium (from 1 to 10 mg/m^3) depend on clinical features of disease and functional parameters. The control matched groups included 95 pts with asthma and 17 pts with allergic rhinitis. All of them received placebo. Placebo course consisted of 15 procedures in the same room with salt coated walls, but DSCA was not produced by halogenerator.

Results: During HT the most of pts showed positive dynamics of symptoms indicative of a better drain function of their airways: sputum secretion alleviated, it became less viscous and more mucousal, coughing relieved, and the auscultative picture of the lungs altered. By the end of the course of HT the number of asthma attacks decreased significantly as compared to the initial ones (94 and 56%, $p<0.01$). The number of severe asthma attacks controlled by combined medication also decreased (24% and 3%, $p<0.01$). Reduction or cancellation in medication usage was an indicator of HT clinical benefit. None of the pts complained of bad condition during HT procedures. The pts showed significant increase of FVC, FEV1, PEF, FEF50 and decrease of Raw by the end of the treatment.

The inclusion of HT into the rehabilitation course of asthma pts allowed achieving therapeutic effect along with the most optimal use of pharmacotherapy. HT resulted in improvement of clinical state in 85% of mild and moderate asthma cases, 75% – of severe asthma cases. The pts were examined 6 and 12 months after HT course. The average duration of remission was 7.6 ± 0.9 months. It has shown that the application of the HT assured 1.5-2 times reduction of morbidity level in follow-up observation.

Positive effect of HT was achieved in 90,4% of the pts with allergic rhinitis. Positive dynamics of the main clinical symptoms was observed. The DSCA improved mucociliary clearance of a nasal mucous epithelium, restored drainage function of a nose; had antiedematous, antiallergenic and anti-inflammatory effect.

The changes of the majority of the clinical and functional parameters in the control group were less statistically as compared to the HT group's ones.

Conclusion: The application of HT on the background of the basic medicinal therapy in pts with asthma and allergic rhinitis renders to positive influence on the clinical and functional parameters. The results of HT application demonstrate its efficacy.

We look at positioning of DSCA with controlled HT as a component of rehabilitation programs for asthma and allergic rhinitis pts.

Cichon Jacek

Three Dimensional Echocardiography – State of the Art

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1. Goal of the analysis: To present a dramatic transition, which made the 3 D Echocardiography, from predominantly a research tool to a technology useful in everyday clinical practice. The overshoot of the outlines the history of 3 D Echo from its beginnings to the most current technology.

2. Description: A part of the examination was performed using the Vingmed platform Vivid 7, the other part using the Vivid E9. The 3 D-Echo was done as a complementary examination to the conventional 2 D-Echocardiography. The validation was assured by the intraoperativ findings and the angiography examinations.