

role in the mechanisms of bronchial obstruction onset mostly through the increase of bronchial hyper-reactivity. Thus, the intensity of allergic inflammation in respiratory airways is inversely correlated with the degree of inflammation caused by RSV.

Key words: Mycoplasma pneumoniae, Chlamydia pneumoniae, Respiratory syncytial virus, bronchial obstruction, asthma, IgE, atopy, children.

MULTIPLE PLASMOCYTOMA - A RARE CASE OF THREE ATYPICAL PRESENTATIONS

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Introduction: The solitary plasmacytoma represents less than 5% of all plasma cell neoplasms. The multiple plasmacytoma is 20 times rarer than solitary plasmacytoma. Progression to multiple myeloma is common.

Methods: Case study

Results: We report a very rare case of multiple plasmacytoma developed in the bone and two atypical sites - renal and gastric. The patient was treated with radiotherapy, surgery and chemotherapy. The case is presented due to its rarity.

Conclusion: The high risk of a progression towards a multiple myeloma justifies a comprehensive initial assessment and regular monitoring of all plasmacytomas. The management of a patient with multiple plasmacytomas will be determined by the sensitivity and the site of the tumor.

Key words: Multiple plasmocytoma, extramedullary plasmocytoma.

THE USAGE OF L-ORNITHINE - L-ARGININE COMPLEX AS A NEW EFFECTIVE STEP IN TREATMENT OF ACUTE TOXIC HEPATITIS

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Liver damage and toxic hepatitis occur mainly due to excessive alcohol consumption, viral infections, chemicals, and as a consequence of drug adverse effects. The symptoms of toxic hepatitis often go away when exposure to the toxin stops. But toxic hepatitis can permanently damage the liver, leading to irreversible scarring of liver tissue (cirrhosis) and in some cases to liver failure. Thus, there is an ongoing need for finding new substances that can effectively prevent and cure hepatic damage, minimizing adverse effects.

Carbon-tetrachloride is extensively being used as a model substance for producing hepatotoxic effects such as fatty degeneration of liver tissue, fibrosis, hepatocellular death, and carcinogenicity.

L-arginine is classified as a nonessential amino acid, but may be considered essential or semiessential in stressful situations, including periods of growth (e.g., during childhood or pregnancy) or trauma (e.g., liver disease, severe sepsis, wound healing, cancer). In jaundiced rats, L-arginine supplementation demonstrated anabolic and immunostimulatory properties. Anabolic actions were also confirmed in studies of L-arginine supplementation and improved wound healing, as well as healing of bones, burns, GI tract, and tendons.

Researchers have confirmed one of the mechanisms of the arginase enzyme action, which produces a favorable environment for fibroblast and collagen production. L-arginine has exhibited protective effects in spinal cord injury in animals and in cortical impact injury in rats. In another study, exogenous L-arginine resulted in decreased hepatic ischemia/reperfusion injury.

L-ornithine metabolizes to form L-arginine and assists in the production of urea. This increases the body's ability to eliminate waste-products. L-ornithine and L-arginine work together synergistically to increase protein synthesis and, ultimately, muscle growth. This aminoacid is necessary for metabolic functions and detoxification purposes. It also contributes to release of HGH by the pituitary gland. L-ornithine is also used to assist in liver and gallbladder cleansing because it helps to produce urea that is used to flush toxic substances out of the liver. Because of the detoxification properties of the aminoacid it is thought to decrease the incidence of gallstones and liver toxins.

The usage of L-ornithine - L-arginine complex for toxic hepatitis treatment is considered to be a new and effective step in the development of modern hepatothology.

Key words: liver, toxic hepatitis, L-arginine, L-ornithine.

CLINICAL PECULIARITIES OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE DEPENDING ON GENDER OF THE PATIENTS

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Introduction: The problem of chronic obstructive pulmonary disease (COPD) is important in the most of countries, despite of numerous anti-smoking campaigns. If in previous decades, morbidity and mortality from COPD among men was significantly higher comparing to women, in recent years these indicators became practically equal in patients of both sexes, moreover, in some countries they dominate in women. According to the worldwide statistics, nowadays COPD kills more women than breast and lung cancers that do together. Therefore, there is a need to research the gender peculiarities of clinical course of COPD.

Materials and methods: The study was conducted on 42 men and women who are smokers and have COPD of the third stage. Age, number of pack-years of smoking, presence of comorbidities and number of exacerbations of COPD during the previous year were considered. Forced expiratory volume in first second (FEV1), the distance in meters, that the patient may walk for 6 minutes, severity of dyspnea by MMRC scale, body mass index (BMI) were assessed in all patients.

Results: Among the patients with COPD the women were younger than men (respectively, 56 and 67 years, $p < 0.05$), they smoked less (respectively, 37 and 58 pack-years, $p < 0.05$), had lower BMI (respectively, 25 and 28, $p < 0.05$), more exacerbations during the previous year (respectively, 1 and 0, $p < 0.05$) and fewer comorbidities. Gender differences in FEV1 were not found. At the same time women with COPD were less tolerant to physical exertion (they could walk for 6 min 94% of the necessary distance, while the males – 102%, $p = 0.05$) and developed more significant dyspnea by MMRC scale (respectively, 3.5 and 2.2, $p < 0.05$).

Conclusions: There are some sex differences in the development and clinical course of COPD, which are caused, apparently, by specific neurohumoral regulation of bronchopulmonary system functions, hormonal influence on the metabolism of tobacco smoke and by different severity of oxidative stress that damages the bronchopulmonary tissue. Further study of sexual peculiarities of COPD may improve the effectiveness of treatment of this widespread disease.