Aspects of Pneumonia in Patients with Pandemic 2009 Ah1n1 Influenza

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During the spring of 2009 the WHO declared 2009 A (H1N1) influenza pandemic. The first case of pandemic influenza A(H1N1), in Republic of Moldova, was registered on July 27, 2009. As of this moment were reported around 29 850 cases of influenza. A part of them were confirmed by RT-PCR (2708 cases of 6500 examined samples). The most severe complication of influenza is pneumonia. From the beginning of the pandemic in Republic of Moldova, has been reported 21 382 cases of pneumonia. Retrospective analysis of medical records of 650 patients hospitalized for at least 24 hours for flu-like symptoms during the period November 2009 - January 2010 in 5 hospitals in Chisinau. Influenza A (H1N1) infection was confirmed by RT-PCR in 114/650 (17.5%) cases, and in 69/328 (21%) patients with pneumonia, in all other examined cases diagnosis of influenza was established on clinical and epidemiological grounds. Of the 650 patients who underwent chest radiography on admission, 316 had findings consistent with pneumonia. Radiological changes of alveolar infiltration, interstitial infiltration, or mixed images met the majority of patients. In 12 (3.6%) patients the diagnosis was established only clinically, chest X-Ray being normal. The average age of patients with pneumonia was 40.8 years, 28 (8.5%) patients were older than 65 years. 32 (10%) patients with pneumonia required hospitalization in an intensive care unit for a period varying from one day to 28 days, 6 patients died (1.8% of all patients with pneumonia). Comorbidities were present in 113/328 (34.4%) patients (COPD, diabetes, cardiovascular diseases, obesity, lymphogranulomatosis, drug addiction). In all patients with flu symptoms, antiviral treatment with oseltamivir was administered from the first day of hospitalization for a period of 5-10 days, radiological infirmation of pneumonia wasn't criterion for annulment of antiviral therapy. Pneumonia can develop both in apparently healthy young people and those with comorbidities and was diagnosed in around 50% of cases of patients who required hospitalization. Antiviral therapy in the first days of disease seems to be associated with a favorable evolution of the disease, with cure.

Pulmonary Rehabilitation in Chronic Obstructive Pulmonary Disease

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The aim of the present review is to cover various aspects of pulmonary rehabilitation (PR) in patients with stable chronic obstructive pulmonary disease (COPD): definition and rationale, outcome measures and patient selection, practical organization and program content. For the articles and reviews about pulmonary rehabilitation were searched in HINARI and MedLine. The keywords were: pulmonary rehabilitation, COPD management, COPD outcomes, chronic bronchitis, exercise training, muscle, health care resources, dyspnoea, health-related quality of life and multidisciplinary approach. Chronic obstructive pulmonary disease is a major cause of morbidity and mortality worldwide and an important worldwide cause of disability and handicap. Centred at exercise training, PR is global, multidisciplinary, individualized and comprehensive approach acting on the patient as a whole and not only on the pulmonary component of the disease. PR is now well recognized as an effective key intervention in the management of several respiratory diseases particularly in COPD. For patients with chronic obstructive pulmonary disease, PR is now considered to be the standard of care for those with at least moderate COPD as well as for those patients with COPD of mild severity (as determined

by spyrometry) who, follow maximal medical care and remain symptom-limited in exercise capacity or functional status. The goal of PR is for the patient to become more physically active and maintain independence a longer period of time. The benefits of PR extend far beyond physical endurance and reduced dyspnoea, and include improved adherence, reduced health care utilization and costs, more patient involvement in disease management, and improved patient outlook. In the recent years, the beneficial effects of a comprehensive and multidisciplinary pulmonary rehabilitation program have been so well documented in COPD that this therapy has gained a prominent position in most guidelines on diagnosis and treatment of this disorder. The magnitude of the effects resulting from pulmonary rehabilitation compare favourably with the available drug therapies in COPD, and the evidence for reducing use of health care resources is increasing. The successful effects of pulmonary rehabilitation in COPD can be largely attributed to the systemic component of the disease, with peripheral muscle dysfunction the best documented.

Pulmonary Arterial Hypertension in Scleroderma

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Systemic sclerosis (SSc) is a rare chronic disease of unknown cause characterized by diffuse fibrosis and degenerative changes in the skin and internal organs. It can cause serious complications in the lungs in two major ways: the pulmonary fibrosis and pulmonary hypertension (PAH). Owing to the fact that lung damage in SSc has a high incidence (70 % in the necropsy studies) and represents the leading cause of death in scleroderma patients, it is required an early systemic evaluation of lung complications in these patients. The objective was to study the particularities of lung complications in patients with SSc. Material and methods This study is based on the surveying of 12 patients with the SSc, aged between 28 and 68 years old, the majority of the patients being females. The diagnosis was established on the bases of the clinical presentation, the laboratory data and the instrumental examination: hemoleucogram, immunological tests (Anti-Scl 70 antibody, Anticentromere antibody), ECG, echocardiography, spirography, chest X-ray, CT of the chest, pulse-oximetry. Results and discussions The lung complications were determined in a big number of patients 83.3 %. PAH was diagnosed in 4 patients: 1 case of severe isolated PAH in a patient with limited form of SSc, and 3 cases of light PAH associated with pulmonary fibrosis. Pulmonary fibrosis without PAH was determined in a half of examined patients. Cor pulmonale was revealed in 2 patients, both of them with PAH. The symptoms of lung damage were non-specific and consisted of shortness of breath from an activity (at 8 patients from 10) and dry cough (at 5 patients from 10). In order to treat the severe PAH was administrated a phosphodiesterase 5 inhibitor (Sildenafil) and a calcium channel blocker (Verapamil) with a good clinical and hemodynamic response. Conclusions: 1. Both the diffuse and the limited subsets of scleroderma patient may develop PAH, but it is more common in patients with limited scleroderma. 2. Symptoms that might indicate PAH are non-specific. 3. Echocardiography is recommended in the annual evaluation of all sclerodermic patients. 4. New effective treatments may improve quality of life and improve long-term outcome.