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AbstractBook

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ECHOCARDIOGRAPHIC ASSESSMENT OF LEFT HEART FUNCTION IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objective: Assessment of the essential echocardiographic parameters of left heart chambers in rheumatoid arthritis (RA).

Methods: Patients with RA and symptoms arised at least 3 months before were included in the study. The exclusion criteria were presence of symptomatic coronary heart disease, arterial hypertension, or diabetes mellitus.

Results: All the included persons (n=24) were women. Their age was 49.6±7.9 y, and disease duration was from 0.5-12.0 y. DAS28-CRP(4) index was 5.0±0.6. All the patients were treated with basic antirheumatic drugs as well as NSAIDs therapy; in 25% of cases glucocorticoids were also applied. Weight excess according to their BMI was found in 16.7% of patients, but neither high blood glucose concentrations nor low GFR were revealed. Mean total cholesterol was 5.59±0.92 mmol/l. No low ejection fractions were registered in patients studied. Mean interventricular septum (IVS) thickness was 8.9±1.0 mm whereas 25.0% patients had high IVS thickness (>10 mm). Mean left ventricle (LV) myocardial mass index was 90.42±23.85 g/m^2, with patients had its mild (25.0%), moderate (8.3%) or pronounced (8.3%) increase. Mean LV posterior wall thickness was 0.92±0.12 cm, and 41.6% patients had it 11 mm or more. Mild LV diastolic dysfunction was also revealed in all the cases (decreased mean average E/A ratio, 0.87±0.24). In 92% of individuals, Grade 1 mitral or tricuspid regurgitation have been found in 92% patients, 8.3% had grade 2 tricuspid regurgitation, and 42% ultrasound manifestations of aortic atherosclerosis.

Conclusion: There are certain morphological and functional changes of heart in RA even in absence of arterial hypertension, or any other primary heart disease. Most common type of echocardiographic changes includes concentric LV hypertrophy with diastolic dysfunction, mild valvular dysfunction without ventricle dilation, and aortic atherosclerosis.

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TUMOR-INDUCED OSTEOMALACIA: DIAGNOSTIC AND REHABILITATION CHALLENGES

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Objective: Tumor-induced osteomalacia (TIO) is a rare paraneoplastic syndrome, which is characterized by renal phosphate wasting and disordered bone mineralization. Due to a non-specific symptoms, small size and slow growth of the tumor, it can take far more than several years to make a correct diagnosis since the appearance of the first symptoms, which may lead to irreversible consequences despite successful treatment. We present a case of the patient with TIO and secondary hyperparathyroidism (SHPT) caused by hungry bone syndrome. **Case report:** A 65-y woman had 12-y history of severe lower back pain, decrease in height by 16 cm during life, multiple atraumatic fractures of the ribs and pelvic bones. The patient moved around using a wheelchair, but initiation of therapy with alfacalcidol 3 mcg/d, cholecalciferol 15 000 IU/week, calcium 1000 mg/d in 2014 improved her condition and she began to move independently. However pain syndrome is contained exclusively by narcotic analgesics (tramadol 200 mg/d). Tumor was localized in 2018 using somatostatin receptor scintigraphy with 99mTc-Tektrotyd in the left inguinal region, which was resected (pathology - mesenchymal tumor, FGF23+). After tumor removal SHPT was observed during 2 following years despite medical treatment with alfacalcidol 3 mcg, cholecalciferol 15000 IU/week and calcium 2000 mg/d, which corresponded to hungry bone syndrome. Normalization of SHRT was achieved only after 2 y of treatment. The BMD increase was significant and continued throughout the 3 years after surgery: +127.7% at hip, +23.4% - lumbar spine, +3.2% - radius. Despite the normalization of the biochemical parameters and increase in BMD, patient's quality of life continues to be significantly reduced. The patient has to use cane and walk for short distances because of multiple bone fractures and severe pain syndrome. **Conclusion:** Our clinical case illustrates that despite the successful results of surgical removal of the tumor, a long course of rehabilitation may be required. Severe pain syndrome due to multiple fractures, hungry bone syndrome and secondary hyperparathyroidism is a challenge in the treatment of these patients. Early diagnosis and initiation of the therapy can reduce the number of complications and improve quality of life parameters.