patients with OI (χ^2=5.54; p=0.019)
Conclusion: Adult patients with OI are characterized not only by a reduced level of bone density, but also by the presence of joint pain without association with recent fractures.

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SPECIFICS OF HEPATITIS B VIRUS SEROLOGIC MARKER TESTING IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objective: Most antirheumatic drugs have an inhibitory effect on the immune system. So one of the complications of disease-modifying antirheumatic drugs (DMARDs) may be the reactivation of hepatitis B virus (HBV) replication in rheumatoid arthritis (RA) patients. We aimed to evaluate the extent of testing for HBV serologic markers in RA patients before DMARD treatment.
Methods: Clinical and laboratory examination of 146 patients with RA aged 24-62 y with negative results for HBV surface antigen (HBsAg-) detection was performed. All patients were screened for antibodies to HBV nuclear antigen (anti-HBcIgG) and antibodies to HBsAg (anti-HBs). 73.3% of patients were taking methotrexate, 52.7% were taking corticosteroids, and 11% were taking genetically engineered biological drugs.
Results: 29 patients were positive for anti-HBs and 13 RA patients were positive for anti-HBcIgG. In 9% of patients, baseline serologic tests indicated prior hepatitis B infection (HBsAg-, anti-HBs+/anti-HBcIgG+, n=11; HBsAg-, anti-HBs-/anti-HBcIgG+, n=2). According to clinical guidelines, patients previously exposed to HBV should be monitored for HBV antigens during DMARD treatment. Preliminary hepatitis B virus DNA (HBV DNA) detection by PCR was performed in only 15 (10%) patients with RA, with the vast majority of patients seropositive for anti-HBs+ only and one patient anti-HBc+. Patients with RA with latent HBV infection or anti-HBc-positive patients may experience HBV reactivation during DMARD treatment; more attention should be paid to detecting not only HBsAg and anti-HBs but also anti-HBc.
Conclusion: RA patients seropositive for anti-HBc need additional screening detection of hepatitis B virus DNA as well as regular testing for HBV DNA by PCR during DMARD treatment.

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COMORBIDITY AND VITAMIN D STATUS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objective: Rheumatoid arthritis (RA) is autoimmune disease characterized by chronic joint inflammation. Given the proposed role for vitamin D as an immune regulator, hypovitaminosis D may be associated with immune-mediated inflammatory diseases including RA. The purpose of this study is to evaluate incidence of comorbidities, serum 25(OH)D and to analyze relationship between patients' RA characteristics and vitamin D status.
Methods: 156 patients with RA were enrolled: 139 women (mean age 60.1±13.7 y) and 17 men (mean age 58.8±13.4 y). Assessment of clinical status included swollen (SJC) and tender (TJC) joint counts, physician's (PhGA) and patient's global assessments of disease activity (PGA), pane assessment by visual analogue scale (VAS). Serum levels of rheumatoid factor (RF), C-reactive protein (CRP), total vitamin D (25(OH)D) were determined. RA disease activity was calculated using DAS28 (disease activity score), SDAI (Simplified Disease Activity Index) и CDAI (Clinical Disease Activity Index). Statistical analysis was carried out using the Statistica 10 program for Windows.
Results: The most frequent comorbidities were cardiovascular diseases (79 patients), endocrine (51 patients), and gastrointestinal diseases (58 patients). 4 patients underwent joints replacement. Osteoporosis was detected in 51 patients (39.9%), osteopenia in 39 (30.5%), 38 patients (29.6%) had normal BMD. 25 patients (16%) had history of fractures. Mean 25(OH)D levels were 25.2±13.2 ng/ml. Normal vitamin D, insufficiency and deficiency were observed in 47 (30.3%), 45 (28.7%) and 64 (40.7%) patients. Low levels of vitamin D were associated with higher rates of RA activity according to the DAS28, SDAI and CDAI indices, as well as with greater number of painful joints. Patients with concomitant diseases (n 105) differed statistically significantly from patients without comorbidities (n 51) in age, age of onset of the disease, PhGA, PGA, CDAI, SJC and TJC. There were no statistically significant differences in 25(OH)D concentrations between groups.
Conclusion: Hypovitaminosis D was observed in majority of patients with RA and was associated with higher RA activity. Vitamin D supplementation should be administered in patients with RA for potential immunomodulatory purposes and for prevention and treatment of bone metabolic disorders.

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TUMOR-INDUCED HYPOPHOSPHATEMIC OSTEOMALACIA: CASE REPORT

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Tumour-induced osteomalacia (TIO) is a rare paraneoplastic disorder caused by tumours secreting FGF23. Clinical manifesta-

tions of TIO develop slowly and are represented by symptoms of osteomalacia including bone pain, fragility fractures, and muscle weakness.Case report: 35-year-old woman with neither significant past medical history nor a relevant family history was referred to our clinic with complains of severe weakness, bone pain, pain in the spine, hip joints, muscles tremors, limited movement, "unruly legs," limitation of movements in the hip joints, decrease in height by 8 cm since 2019. Considers herself sick since 2019, when bone pain first appeared, avascular necrosis of both femoral heads was diagnosed on MRI and autologous bone grafting was performed. The first metabolic disorders were also detected in 2019: calcium 2.11 mmol/l (normal value 2,15-2,55), phosphorus 0.44 mmol/l (normal value 0,87-1,45). Other laboratory findings PTH: 78 pg/ml; normal value 15-68,3, alkaline phosphatase 238 U/l; normal value 35-105, 25(OH)D 22,1 ng/ml, normal value 30-50 ng/ml. Chest CT: multiple rib fractures, fractures of acromion. Osteoscintigraphy: multiple foci of bone destruction. Malignancy, parathyroid pathology, myeloma were excluded. There was a progressive decrease in bone mineral density from 2019-2021 (Z score - 2,6). Considering the persistent decrease in phosphorus (from 0,36 to 0,59) and calcium (from 2,04 to 2,2) in the serum, it was assumed that the patient might have TIO. Tubular reabsorption of phosphorus was normal (94,3%) and 99mTc bone scan did not reveal SSTR-positive receptor tissue. Multiple sites of hyperexpression of SSTR in bones with probable primary FGF23 tumor site were identified in the lateral condyle of the right tibia on 68Ga-DOTATATE PET/CT scan. Laboratory testing showed increased FGF23 level (328 kRU/L, normal 26-110 kRU/L). Patient was treated with phosphorus, calcium and vitamin D supplements, bisphosphonates and non-steroidal anti- inflammatory drugs without significant improvement as new locus of aseptic necrosis of the right humeral head occurred. Investigation with targeted examination of the suspicious area is planned to determine further treatment strategy including burosumab administration.Conclusion: TIO is an underdiagnosed disease, leading to disability and mortality, whose awareness should be increased among physicians for timely and proper management of patients.

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EFFECTS OF EXTRACORPOREAL SHOCK WAVE THERAPY ON PATIENTS WITH TRIGGER FINGER

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Objective: Tendons that flex the fingers and thumb are affected by the trigger finger, which usually causes a locking or catching sensation when bending and straightening the digits. A trigger finger can affect anyone, but it is more common in middle-aged active people with occupations that involve heavy lifting, repetitive motions, grasping, gripping, or applying force with the fingers and thumbs (farming or gardening, industrial work, and racket sports, so on) [1-3]. Also, people with particular medical problems, such as gout, diabetes, metabolic syndrome, rheumatoid arthritis, osteoarthritis, amyloidosis, and thyroid disease have an increased risk of developing trigger finger [1-4]. We conducted a study that aims to investigate the effectiveness, safety, and potential benefit of using extracorporeal shockwave therapy (ESWT) as an alternative option for the treatment of trigger finger.

Methods: Sixteen patients, who were 2nd grade according to Quinnel classification and diagnosed with trigger finger, were included in this prospective cohort clinical study. Sixteen patients with trigger fingers were applied to 10 sessions, twice a week, for 3 weeks of rESWT (2000 impulses, 2.5 bars, 10-15 Hz). Pain scores (Numeric Pain Rating Scale), general functional capacity (Quick-DASH), range of motion, grip strength with Jamar Dynamometer, and pinch strength were evaluated before treatment, after treatment, and 3 months after the treatment.

Results: Pinch strength measurements using a dynamometer show a progressive improvement in pinch strength over time. Average pinch strength: 3.6 units represent the baseline pinch strength in the initial moment. After 3 weeks of intervention, there is a noticeable increase in average pinch strength of 4.5 compared to the initial moment. A pinch strength value of 5.7 indicates a significant enhancement in pinch strength compared to both the initial and second moments. Overall, the increasing trend in average pinch strength from the initial moment to the third moment suggests a positive response to the ESWT treatment received.**Conclusion:** The results indicate that individuals experienced a progressive improvement (p-value 0.00022) in their pinch grip strength over the three-time points.

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REHABILITATION TREATMENT IN A PATIENT WITH FRACTURE OF THE LEFT HUMERAL DIAPHYSIS WITH LEFT RADIAL NERVE PARALYSIS, TREATED ORTHOPEDICALLY AND SURGICALLY: CASE PRESENTATION

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To highlight the role of a complex physical-kinetic treatment, applied to a patient with a spiroid fracture of the middle third of the left humeral diaphysis, initially treated orthopedically, after 2 weeks of metal osteosynthesis (screw plate), with paralysis of the left radial nerve.

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