Conclusions: The goal of the approach and treatment of osteoporosis is to reduce the number of osteoporotic fractures. Of the 13 patients observed, 12 had clearly indication for a osteodensitometria, according to the age criteria. This review highlights the need for a correct approach to osteoporosis, which measures may prevent osteoporotic fractures and consequently diminished quality of life.

P10. OSTEOPENIA SYNDROME IN CHILDREN AT PRESENT TIME

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Introduction: Pathology of the musculoskeletal system takes one of the leading places in the structure of child morbidity in Ukraine.

Objectives: Revealing of peculiarities in the formation of osteopoenia syndrome in children and adolescents at the present stage.

Methods: Monitoring of the structural and functional state of the bone tissue among 4,200 children students aged 9-18 years of Kharkiv region was conducted during 2005-2015. The study of the bone tissue's state was performed on the ultrasound densitometer "Sonost. 2000" and on the base of biochemical markers of bone remodeling.

Results: Over the last 10 years the negative dynamic in the state of bone tissue was observed. The incidence of osteopenia (OP) among students was increased in 1.4 times (from (29.5 ± 3.1)% in 2005 to (41.2 ± 3.6)% in 2015). It was found the increase of moderate OP (from (36.7 ± 2.8)% in 2005 to (46.1 ± 4.1)% in 2015) and decrease of mild OP ((43.3 ± 5.1)% and (32.8 ± 3.8)%, respectively), while the prevalence of 3-rd degree remains at the same level ((20.0 ± 2.5)% and (21.1 ± 2.5)%, respectively). The OP was increased in 2 times in puberty ((18.2 ± 2.0)% and (35.6 ± 4.7)%, respectively, in 2005 and 2015. 68% of students have primary OP of 2-nd degree. Hypodynamia (r = 0.92), eating disorders with excessive consumption of sweet carbonated beverages, snacks and fast food products (r = 0.88) and having bad habits (r = 0.86) are the significant medical and social risk factors of OP in adolescents. Regarding biochemical markers**,** the most influential are the increase of daily oxyproline excretion (r = 0.84) and reduction of I fraction of glucosamin glucan sulfates (r = 0.85).

Conclusions: Detection of risk factors allows us to predict disorders of structural and functional state of bone tissue and to conduct OP prophylaxis.

P11. ADVERSE EFFECTS OF BISPHOSPHONATES IN THE TREATMENT OF OSTEOPOROSIS. A CLINICAL CASE

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Introduction: Osteoporosis is a high prevalence disease and it is expected to increase its number of cases in the upcoming decades associated with the aging of the world population. It is often connected with increased morbidity and mortality and reduced quality of life, as well. Therefore, its treatment and prevention are extremely important. Pharmacological treatment of osteoporosis may include the use of bisphosphonates. However, the frequent occurrence of adverse effects and drug intolerance may decrease therapy adherence, making it difficult to control the disease. We present a case of a female patient with onset of ocular symptoms after starting alendronate.

Objectives: Review recent evidence of adverse effects associated with the use of bisphosphonates in the treatment of osteoporosis.

Methods: Classical Review. Research published articles in PubMed database using the MeSH terms "bisphosphonates", "adverse effects".

Results: The orally administered bisphosphonates are usually well tolerated, but often associated with upper gastrointestinal symptoms such as epigastric pain, dyspepsia, nausea and vomiting. There were also reports of osteonecrosis of the jaw, atrial fibrillation, atypical fractures of the femur and ocular events.

Conclusions: Bisphosphonates are an important feature in the treatment of osteoporosis, reducing the risk of vertebral and non-vertebral fracture. The safety and tolerability of bisphosphonates is sustained and serious adverse reactions are rare. However, the possible effects should be known when prescribing this drugs, taking into account the characteristics and personal history of each patient.

P12. TRÊS CASOS DE MANIFESTAÇÕES REUMÁTICAS NA HEMOCROMATOSE

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Introdução: A hemocromatose é uma doença hereditária do metabolismo do ferro, frequentemente associada a mutações no gene HFE (C282Y/H63D, homozigotia/heterozigotia composta), com envolvimento músculo-esquelético frequente (até 64%) mas variável, salientando-se a associação com osteopénia.

Casos clínicos: Caso 1: M.F.L.M., feminino, 55 anos, pós-menopausa. Avaliada por poliartralgia inflamatória. Velocidade de sedimentação (VS), proteína C reativa (PCR), anticorpos antinucleares (ANA), anti-péptido citrulinado, HLA-B27 negativos, fator reumatoide (FR) *borderline*. Densitometria óssea (DXA): T-score rádio total -3,13, fémur total -0,61 e L2-L4 -0,44. Foi medicada com celecoxibe (400 mg/dia), deflazacorte (6 mg/dia), alendronato e suplementação de vitamina D por hipovitaminose D. Apresentava elevação das enzimas hepáticas e de ferritina (máximo: 421 µg/L), siderémia e hemoglobina normais. O estudo genético documentou heterozigotia composta H63D/C282Y. Caso 2: E.S.B., masculino, 59 anos. Quadro de perda ponderal (≈10 Kg) há cerca de 3 anos, mantendo elevação dos parâmetros inflamatórios. Avaliado por poliartralgia com episódios de tumefação das articulações das mãos, iniciando meloxicam e deflazacorte por períodos. Analiticamente: VS e PCR elevadas; ferritina 559 µg/L, sideremia normal; ANA, anti-dsDNA, anti-SSA/SSB, anti-mitocôndrias, FR e HLA-B27 negativos. Radiografia das mãos com rizartrose bilateral e aspetos degenerativos de interfalângicas distais. O estudo genético revelou heterozigotia composta para hemocromatose. Caso 3: J.S.A, masculino, 80 anos. Avaliado por podalgia mecânica, com radiografia e tomografia dos pés compatíveis com artrose das tíbio-társicas e tarso-metatársicas e aspetos de diminuição da trabeculação óssea, predominantemente juxta-articulares; DXA com T score -2,1 (colo do fémur). Analiticamente: VS, PCR e enzimologia hepática sem alterações, FR negativos, ANA 1:320, ferritina 729,8 µg/L, sideremia normal e vitamina D 8 µg/L, iniciando suplementação de vitamina D. O estudo genético documentou homozigotia para a mutação C282Y do gene HFE.

Discussão: Os casos ilustram a diversidade das manifestações reumáticas em doentes com hemocromatose. Todos cursaram com poliartralgia, com localização e ritmo variáveis, verificando-se perda de massa óssea em dois casos.

P13. VITAMIN D BURNOUT

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Introduction: Vitamin D deficiency is a common problem, underdiagnosed and undertreated between Portuguese population. It

is associated with significant morbidity and mortality, and decreases considerably quality of life leading to physical, psychological and social problems.

Case report: A 45-year old married woman, nurse, physical active, with no history of chronic medication or chronic diseases, presented to her family doctor in January 2015 with complaints of fatigue, generalized joint pain and greater difficulty in focus during work. She described an "increased workload for the last three months" (sic), but she didn't understand the excessive fatigue because "I love what I do" (sic). Physical examination showed no change. It was made advice on relaxation exercises and strategies to prevent burnout. Blood tests were requested. In laboratory studies vitamin D had a value of 18.4 ng/ml. The patient began vitamin D supplementation and conducted a follow-up at 3rd and 12nd months. The patient's complaints improved significantly over supplementation months, with total regression in January 2016.

Discussion: Vitamin D deficiency is presented as a problem that, although appears simple, it may achieve some complexity, since it goes far beyond the physical findings, and often undertakes various areas of life. It may be underdiagnosed because there is difficulty to recognize and verbalize multiple and nonspecific complaints, apparently non-related. Doctor may have an important role identifying this problem: being alert to its prevalence, screening and differential diagnosis. It is also emphasized the importance of the correct therapeutic approach, which is a very effective way to improve life quality and regression of the clinical condition.