

Menopause is a risk factor, in long term, to the increased incidence of osteoporosis. Attending to this subject importance, and in order to determinate the level of evidence of isoflavones prescription in osteoporosis prevention in postmenopausal women, it was considered pertinent the preparation of this review. We performed a literature search in databases of National Guideline Clearinghouse, Cochrane Library, Canadian Medical Association Practice Guidelines InfoBase, DARE, Bandolier, Evidence based Medicine online and Pubmed in the last decade studies in English and Portuguese, using the terms MeSH: "Isoflavones" and "Bone Density." For stratified the level of evidence and strength of recommendation, the SORT scale of the American Academy of Family Physicians was used. Inclusion criteria: PICO (Population: postmenopausal women; Intervention: isoflavones; Comparison: other treatments or no one; Outcome: prevention of decreased bone density). 282 articles were founded and 11 were selected for review, including 4 meta-analyzes, 3 systematic reviews and 4 randomized controlled trials. Analyzed studies revealed the existence of controversy in this subject. One meta-analysis and 3 systematic review concluded that isoflavones may prevent osteoporosis in postmenopausal women, however this effect will depend on factors such as the dose, the treatment duration and the time since menopause. It is also necessary to consider possible interactions between isoflavones and anti-osteoporotic drugs, so it is premature to recommend the prescription of these supplements. A meta-analysis was inconclusive. 4 clinical trials and 2 meta-analyzes concluded there is no benefit in supplementation with isoflavones in the prevention of osteoporosis. With this review we concluded that isoflavones may have some effect in preventing osteoporosis but there is insufficient evidence to justify their prescription for this purpose (level of evidence 1, grade A of recommendation).

P07. EARLY MENOPAUSE AND DECLINE OF BONE MINERAL DENSITY – A CLINICAL REPORT

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Osteoporosis is the most common bone disease characterized by increased loss of bone mass and deterioration of its microstructure, increasing the risk of fracture. There are multiple risk factors for its development, particularly affecting women after menopause. We report the case of 35 years old woman that came to our general practice consultation in January 2016, with complaints of intense back pain and low back pain without irradiation, with months of evolution, without history of previous trauma and pain with mechanical characteristics. From her case history stands out: early menopause when she was 21, secondary to chemotherapy and radiation therapy due to invasive ductal carcinoma of the breast in 2001; Acute lymphoblastic leukemia in 2006 followed by new chemotherapy, radiation therapy, long term corticosteroid therapy and bone marrow transplant in 2007; bilateral hip prosthesis after aseptic necrosis in 2008, with dysmetria of members. She remains being followed by Oncology. Bone densitometry in 2015 compatible with osteopenia, having as chronic medication calcium and cholecalciferol. On the objective examination, is observed limbing, without pain on palpation of the spinous process of vertebra or others changes. We prescribed topical anti-inflammatory, oral muscle relaxant and analgesic therapy. The radiography of column and bilateral hip excluded osteoporotic fractures. The osteoarticular complaints in this context could be attributed to an osteoporotic fracture, and bone metastasis, but this probability is reduced by frequent follow-up in oncology. Considering to early menopause and osteopenia, it is indicated supplementation with calcium and vitamin D. Furthermore, hormone replacement therapy is contra-indicated in this patient. The family doctor, with his holistic approach and continuity of care,

is essential in the early detection of the disease, taking into account the risk factors of this patient, and also in reinforcement of the implementation of long-term preventive measures (pharmacological and non-pharmacological).

P08. EPIDEMIOLOGY OF LOWER LIMB FRACTURES IN UKRAINIAN POPULATION

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Introduction: Fractures are a considerable public health burden but information on their epidemiology in Ukraine is limited.

Objectives: The aim of the study was to establish the incidence of lower limb fractures in Ukrainian population.

Methods: We identified 665 subjects from 76,765 citizens, living in Vinnitsa region, who had a first time (incident) diagnosis of lower limb fractures recorded in the regional Hospital database from 1.01.2011 to 31.12.2011.

Results: Frequency the lower limb fractures of was 42.4% from the total fractures in all patients and 44.4% from the total fractures in patient aged 50 years and older. The most common anatomic site of lower limb fractures was the tibia and/or fibula (48.9% of all incident lower limb fractures), followed by the hip (29.5%), and the tarsal/metatarsal bones (21.6%). Incidence of fracture in patient 50 years and old was 519.8 per 10,000 patient for lower limb fractures, 212.3 per 10,000 patient for tibia and/or fibula fractures and 226.9 per 10,000 patient for hip fracture. Lower limb fractures were more common among males than among females in the younger age groups (up to 39 years old). Among subjects 50 years and older the incidence of lower limb fractures was higher in women than in men, and the difference increased with increasing age. Incidence of the tibia and/or fibula fractures was 340.7 per 10,000 patient in the age group 60-69 years old, 44.9 per 10,000 patient in age group 70-79 years old, and 102.4 per 10,000 patient in age group 80-89 years old.

Conclusions: Our study provided the new information about the epidemiology of lower limb fractures in Ukrainian population according the age. This information is important for planning of the prevention and treatment strategy in patients of different ages.

P09. FEMORAL FRACTURE, REALITY IN A FAMILY HEALTH UNIT

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Introduction: Osteoporosis is characterized by low bone mass and deterioration of bone microarchitecture, weakening the bone and increasing the risk of fracture. Post-menopausal women and elderly men and women are the groups which are at greater risk of suffering from osteoporotic fractures.

Objectives: To assess the prevalence of hip fracture at the Family Health Unit and verify the indication for bone osteodensitometria.

Methods: Cross-sectional study. We analyzed all patients coded with the diagnosis of hip fracture (L75 coding) during the year of 2015. The data were obtained from the MIM@UF program.

Results: In the year of 2015, a total of 13 patients were coded with femoral fracture, with a prevalence of 0.13%. Regarding the sample of users, 4 were males and 9 of the patients were female. Patients were between 57 and 105 years old, with an average age of 83.7 years. Of the total patients evaluated, none previously had a bone osteodensitometria prescription or pharmacological treatment with anti-resorptive therapy.

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 osteopenia 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 $29.5 \pm 3.1\%$ in 2005 to $41.2 \pm 3.6\%$ in 2015). It was found the increase of moderate OP (from $36.7 \pm 2.8\%$ in 2005 to $46.1 \pm 4.1\%$ in 2015) and decrease of mild OP ($43.3 \pm 5.1\%$ and $32.8 \pm 3.8\%$, respectively), while the prevalence of 3-rd degree remains at the same level ($20.0 \pm 2.5\%$ and $21.1 \pm 2.5\%$, respectively). The OP was increased in 2 times in puberty ($18.2 \pm 2.0\%$ and $35.6 \pm 4.7\%$, 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 osteopenia.

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, siderémia 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-metatarsais 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, siderémia 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