From April 4 to April 7, 2019 the beautiful city of Paris (France) became the host place for one of the important and most-expected scientific annual events for traumatologists, rheumatologists, endocrinologists and a lot of other medical specialists, who works in the field of musculoskeletal diseases, especially with osteoporosis, osteoarthritis, frailty and sarcopenia. The IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases took place in the modern Palais des Congrès in Paris. During 4 days of Congress each of 4136 delegates had an opportunity to take part in 19 non-sponsored symposia sessions, 10 plenary sessions, 15 special sessions and symposia, 8 industry-sponsored symposia and 14 meet-the-expert sessions, 38 oral communications as well as to listen to 19 highest quality oral presentations which have been selected among 1416 submitted abstracts.

The Scientific Committee, co-chaired by Professor René Rizzoli and Professor Cyrus Cooper, had an extremely difficult task to set up an exciting and comprehensive program that brings together the world’s best in the field of musculoskeletal health and disease and takes advantage of the synergies and combined expertise of International Osteoporosis Foundation (IOF) and European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO) who have been working in partnership for many years. The main purpose of this high level scientific meeting in Paris was to gather new knowledge, skills and tools in the prevention and treatment of osteoporosis and osteoarthritis, the two most disabling conditions in elderly people.

It is proud to mention that the delegation of Ukrainian Association of Osteoporosis and the president of the Association prof. Vladyslav Povoroznyuk (D.F. Chebotarev Institute of Gerontology NAMS of Ukraine, Ukrainian scientific center of osteoporosis, Kyiv, Ukraine) are the regular participants of the IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases. This year 20 members of Ukrainian Association of Osteoporosis took part in the Congress, and all of them had the invitation from ESCEO for free participation in this event. The team of Ukrainian scientists from D.F. Chebotarev Institute of Gerontology NAMS of Ukraine, Ukrainian scientific center of osteoporosis (Kyiv, Ukraine), prof. Natalia Grygorieva, Olena Rybina and the president of the Association prof. Vladyslav Povoroznyuk presented their report in the Committee of National Societies special plenary session.

After the invitation speech of ESCEO President Jean-Yves Reginster the scientific part of the Opening Ceremony of IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases — 2019 started with the lecture of Professor René Rizzoli (Geneva University Hospital and faculty of medicine, Geneva, Switzerland) about best clinical papers in 2018 year as for identification of osteoporotic patients to be treated, osteoporosis treatment and its complications, physical activity of patients with osteoporosis, osteoporosis prevention with nutrition as well as about sarcopenia and the role of vitamin D. In the clinical trial of effect of alendronic acid on fracture healing (Duckworth A.D., 2019) there was concluded that among patients aged 50 years and above with a distal radius fracture, early administration of alendronic acid did not adversely affect fracture union or clinical outcome. Those findings had suggested bisphosphonate therapy could be safely commenced early after fracture if clinically indicated. In a phase III randomized placebo-controlled trial to evaluate efficacy and safety of romosozumab in men with os...
teoporosis (Lewiecki E.M., 2018) there was established that treatment with romosozumab for 12 months in men aged 55 to 90 years had increased the spine and hip BMD compared with placebo and was well tolerated in men with osteoporosis. A. Sokal et al. (2019) had analyzed women and newborn outcome after maternal exposure to bisphosphonates and had found no major teratogenic effects of bisphosphonates, but rates of neonatal complications had been increased for women with systemic diseases, as were spontaneous abortions for women with bone diseases likely linked to the severity of the underlying diseases and concomitant medications. In January 2019 the revised European consensus on definition and diagnosis of sarcopenia had been presented. It had been focuses on low muscle strength as a key characteristic of sarcopenia, used detection of low muscle quantity and quality to confirm the sarcopenia diagnosis, and identified poor physical performance as indicative of severe sarcopenia; had updated the clinical algorithm that could be used for sarcopenia case-finding, diagnosis and confirmation, and severity determination and had provided clear cut-off points for measurements of variables that identify and characterise sarcopenia. In the prospective cohort study of association of dairy intake with cardiovascular disease and mortality in 21 countries from five continents (PURE) (Dehghan M. et al., 2018) dairy consumption had been associated with lower risk of mortality and major cardiovascular disease events in a diverse multinational cohort. In the recent study by JoAnn E. Manson et al. (2019) it had been shown that the using of supplementation with vitamin D had not been resulted in a lower incidence of invasive cancer or cardiovascular events than placebo.

Another lecture of Professor René Rizzoli (Geneva University Hospital and faculty of medicine, Geneva, Switzerland) highlighted the key points European Guidance for the Management of osteoporosis — 2019. The recommended lifestyle points were: calcium intake 800–1000 mg/day, protein ≥ 1 g/kgBM/day, vitamin D 800 IU/day, daily weight-bearing physical activity, fall prevention measures. The utility of age-dependent FRAX thresholds in population screening approach had recently been validated as feasible, effective and health economically viable. Coordinator-based Fracture Liaison Services (FLS) should be used to systematically identify men and women with fragility fracture. If to speak about treatment, the bisphosphonates, denosumab, menopausal hormone therapy, teriparatide (if high fracture risk or imminent risk) and local osteo-enhancement procedure (if increased hip fracture risk) remained the key therapeutic options. The follow-up period recommendations included assess for compliance and side effects, bone turnover markers to verify compliance to bone resorption inhibitors (after 3–6 months), consider continuing or changing treatment (after 3 years of intravenous or 5 years of oral bisphosphonates, if incident fracture, low risk patients: possible discontinuation for 2 years (reconsider yearly), high risk patients: continue treatment), denosumab discontinuation may be associated with vertebral (multiple) fractures consider then bisphosphonates for 1–2 year.

The next special lecture was presented by A. Astrup (Department of Nutrition, Exercise and Sports, University of Copenhagen, Copenhagen, Denmark) and covered the topic of health effects of dairy matrix. Recent researches had shown that saturated fat (SAT) did not exert the adverse effect on cardiovascular disease (CVD) previously thought, and that the various saturated fatty acids exerted very different biological effects, which were substantially modified by the food matrix. For example, in case with cheese and yogurt, which might be expected to increase CVD risk due to high content of SAT and sodium, studies indicated the opposite — the reduction in blood lipids and blood pressure, and reduced risk of CVD, type 2 diabetes, osteopenia, osteoporotic fractures and particularly of stroke. Dairy, in particular, full-fat, exerted beneficial effects on LDL-cholesterol, blood pressure and postprandial triglycerides as compared to butter. Whereas the low-fat version might be helpful for non-diabetic overweight and obese individuals, the full-fat versions are optimal for type 2 diabetes. So, a diet including dairy, particularly cheese and yogurt should be recommended for all to prevent and manage type 2 diabetes, CVD and osteopenia/osteoporosis.

The lecture programme of Opening Ceremony of IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases have been traditionally finished with the lecture “Diseases in art paints”, which this year was presented by Davide Lazzeri. The lecturer presented information about visual signs of common musculoskeletal diseases in the world famous art legacy. The topic is rather popular in the scientific medical society and 40 papers about diseases in art have been published in the last 4 years.

The great interest of participants was turned to plenary lecture of the ESCEO President Jean-Yves Reginster (University of Liège, Liège, Belgium). On behalf of the ESCEO Working Group on knee osteoarthritis Prof. Jean-Yves Reginster presented the algorithm of management of knee osteoarthritis, updated in 2019. ESCEO had revisited the treatment algorithm recommendations in the light of the new evidence and developed new recommendations based upon systematic literature review.
and application of the GRADE process. The combination of treatment modalities including non-pharmacological and pharmacological intervention remained key to the management of knee OA. As step 1 pharmacological treatment, ESCEO advocated the use of background therapy with chronic SYSADOAs, specifically pharmacetical-grade prescription Crystalline Glucosamine Sulfate and Chondroitin Sulfate, for which the evidence is unequivocal. Recent concern over the safety profile of Paracetamol raised questions over its routine, chronic use, due to increasing evidence of adverse events. Topical NSAIDs might be added to step 1 background therapy or used in preference to oral NSAIDs, particularly in OA patients aged > 75 years and those with co-morbidities or at increased risk of systemic AEs. If step 1 treatments showed inadequate efficacy, or in patients presenting with severe-severe pain, benefit might be obtained with advanced pharmacological treatments, such as oral NSAIDs. Oral NSAIDs selection should be based on the patients' risk profile. Intra-articular Hyaluronic Acid might be a good alternative to NSAIDs for knee OA, with a better safety profile. Last pharmacological options for the severely symptomatic patients were represented by short-term weak opioids, such as Tramadol. Eventually, total knee replacement surgery was appropriate when all previous modalities had failed, or if the patients were severely symptomatic and they presented significant loss in quality of life.

The Committee of National Societies special plenary session included 11 oral communications. The members of the Ukrainian Association of Osteoporosis Prof. Natalia Grygorieva (presenting author), Olена Rybina and the president of the Association prof. Vladyslav Povoroznyuk (D.F. Chebotarev Institute of Gerontology NAMS of Ukraine, Ukrainian scientific center of osteoporosis, Kyiv, Ukraine) presented results of their study about vertebral pain (VP) and physical performance (PP) indices in postmenopausal women with vertebral fractures depending on bone mineral density parameters. 113 females aged 50–89 years old with vertebral fractures in thoracic and/or lumbar spine had been examined. They had been divided into 3 groups: I — patients with osteoporosis (OP), according to WHO criteria for DXA, n = 54; II — women with osteopenia (OPN), n = 37; III — females with normal BMDs, n = 22. The parameters of VP in thoracic and/or lumbar spine had been measured by 11-component visual analog scale (VAS), the indices of PP using static and dynamic functional tests (Thomayer, Schober tests, chest excersion, lateral trunk lean, 3-, 4-, 15-meter tests, “stand up from the chair”, static balancing). BMD had been measured by DXA (Lunar, Prodigy). The results had showed the significantly lower parameters of weight and height in women with VF and OP or OPN compared to females with NB. However, there had been established no reliable differences of VP neither in thoracic nor in lumbar spine depending on BMD state. Also, there had been no significant differences of most parameters of PP, except for the indices of chest excursion (mean parameter, of the inhalation and exhalation) which had been reliably lower in patients with OP. Authors concluded that the indices of VP and PP did not differ in postmenopausal women depending on BMD parameters, except for chest excursion that should be taken into account in rehabilitation programs for females with VFs.

The topics that were also discussed during this plenary session were “Determinants and health consequences of a rapid muscle health decline in older adults from the SARCOPHAGE study” (M. Locquet, Liège, Belgium), “The association between resting metabolic rate and sarcopenia obesity in overweight and obese adult women” (K. Mirzaei, Tehran, Iran), “Will there be a fracture in their future? Bone mineral density findings in young south-east Asian women with anorexia nervosa” (M. Chandran, Singapore), “The benefits of regular weight bearing activity throughout the life-course: do men and women reap the same rewards?” (J. Zhang, Southampton, UK), “Association of 25-hydroxy vitamin D with bone turnover markers and bone mineral density in an Iranian elderly population” (S. Gharibzadeh, Tehran, Iran), “Serum vitamin D level associated with cognitive and physical functioning of postmenopausal women” (A.A. Popov, Ekaterinburg, Russia), “Postpartum osteoporosis associated with vertebral fractures” (N. Temelkova, Sofia, Bulgaria), “Validation of the fracture risk assessment tool (FRAX) calculator in Taiwan: two cohorts study” (C.H. Wu, Tainan, Taiwan), “Prevalence of sarcopenia in Indian men and women varies according to the self-definition used” (A. Zengin, Melbourne, Australia) and “Family history influences fracture risk BMD independently” (A. Gasparik, Timisoara, Romania).

To conclude, it must be said a lot of words about proud and congratulation of Ukrainian Association of Osteoporosis, especially of the team of the president of the Association prof. Vladyslav Povoroznyuk. During some recent years they adequately represent our country on annual IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases.

The next, 20th IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases will take place in Barcelona in April 2–5, 2020.

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