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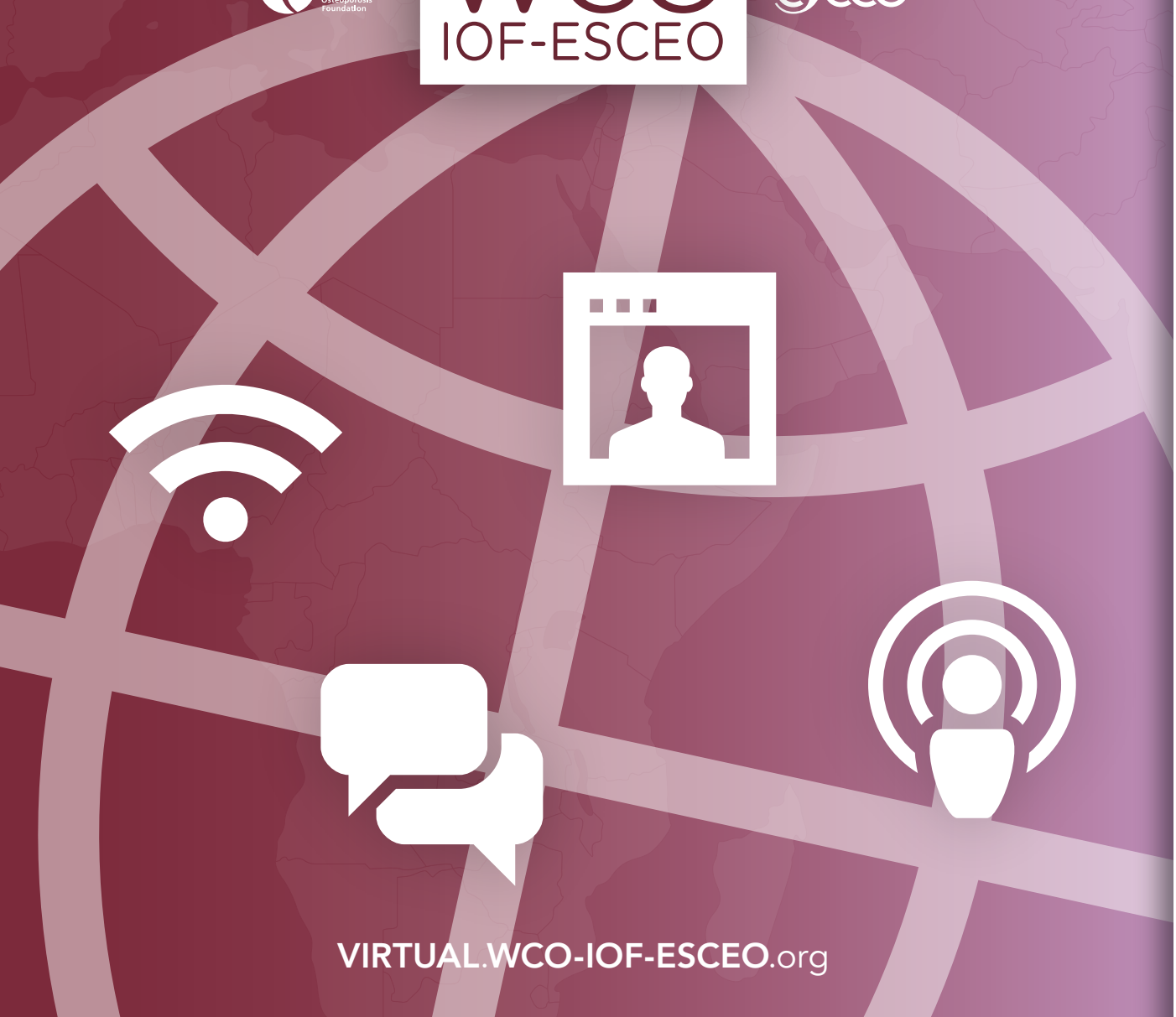

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AbstractBook

Methods: An observational and cross-sectional study has been designed. We included nursing staff and patients admitted to hospital who were receiving an oral bisphosphonate. An audit was carried out for patients where the variables collected were age, gender, presence of cognitive impairment, knowledge on the use of alendronic acid, how long they had been on treatment, adherence, compliance and who administers the treatment (self, dosette box, carer, family, etc.). Another audit was carried out with nurses focusing on their understanding of bisphosphonates, including administration.

Results: A total of 50 patients (82% women) with an average age of 80.36 y and 47 nurses were included. Of the patients, 48% know what a bisphosphonate is, 76% are compliant and 48% are adherent with treatment. 50% have been taking it for <5 y, 30% between 5-10 y, 12% for >10 y and the remainder do not remember. Depending on the form of administration: 58% self-administer, 8% by dosette and 36% is administered by a caregiver or relative. 32% have cognitive impairment. With reference to the nurses' results: 46.8% know what a bisphosphonate is, 42.55% how to administer it correctly. 70.2% know that it is weekly, 72.34% that it is administered in the morning and only 42.55% that it should be taken in aids and in an upright position.

Conclusion: There is little knowledge of the treatment, less than 50% of patients and nurses know its mechanism of action and among nurses there is a low percentage who know how to administer it correctly. Patients are quite compliant but not very adherent to the treatment. In view of the results, first line treatment for a disease as relevant as osteoporosis should be easier to administer and more effective.

P820
INCIDENCE AND 1-YEAR MORTALITY OF FALL-RELATED INJURY IN HONG KONG OLDER POPULATION

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Objective: Fall is the leading but preventable cause of injuries in elderly and is often presented as an unspecific geriatric syndrome for endocrine disorders, such as diabetes and osteoporosis. We aimed to study the incidence of fall-related injuries and their associated mortality in Hong Kong older population.

Methods: This retrospective cohort study was based on the populationwide electronic database Clinical Data Analysis and Reporting System (CDARS) in Hong Kong. All patients, aged ≥65, with ICD-9 diagnostic codes for accidental fall (E880-E888) between 2005-2018, were identified. Incidence of fall was age- and sex-standardized to 2011 Hong Kong census population. The trend of 1-year mortality after fall was assessed using linear regression. Control cohort was the patients admitted to Accident & Emergency (A&E) department, matching with age, sex and year of admission.

Results: A total of 190,748 patients were identified. The number of patients admitted due to fall increased from 11,330 in 2005 to 24,211 in 2018 (increased by 113.69%). The standardized incidence rate increased significantly from 15.27 per 1000 population (95%CI, 15.00-15.56) in 2005 to 19.49 per 1000 population (95%CI, 19.24-19.74) in 2018 (P_{trend}<0.001). Among all studied patients, 69.89% were admitted with fracture, with hip being the most presented fracture site (53.90%). The average 1-y mortality rate from 2005-2017 was 157.53 per 1000 cases, compared to 34.6 expected mortality per 1000 persons in the general population aged 65 or above. There was no significant change in the trend of 1-y mortality (p=0.225). Compared to the matched older population admitted to A&E, older people with incident fall had a 1.67-fold increased risk of 1-y mortality (OR:1.67; 95%CI: 1.57-1.78, p<0.001).

Conclusion: A significant elevation in fall-related incidence was observed in Hong Kong older population, and fall is associated with increased risk of mortality when compared with general population and patients admitted to A&E. Fall prevention should become the top public health priority, especially when the global life expectancy keeps increasing.

P821
DYSLIPIDEMIAS IN RHEUMATOID ARTHRITIS PATIENTS RECEIVING BASIC TREATMENT

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Objective: To study the lipid profile changes of rheumatoid arthritis (RA) patients treated with methotrexate (MT) for identification of the relationship between traditional and the disease-related factors.

Methods: The study included 20 RA patients receiving MT as the basic therapy. Patients with the concomitant conditions that can influence values of lipid biomarkers were excluded from the RA group. Statistical processing of the results was performed using SSPS 20.0 software package.

Results: 15 women and 5 men with mean age 53.8±9.4 y and mean disease duration 4.8±3 y were among the RA group. All patients had DAS28-CRP(4) score not <7.06. Seropositivity was found in 80% of cases. The average BMI in RA group was 28.3 kg/m^2. All patients were treated with MT 12.5-20 mg/week for more than 6 months, NSAIDs. All the patients had dyslipidemia. Total cholesterol (TC) increase was found in 80% of cases, with average TC level 5.63±1.6 mmol/L. Similarly, 80% patients had high LDL cholesterol (LDL-C) values, and mean LDL-C was 3.74±1.16 mmol/L. Triglycerides was abnormal in 40% patients, and decreased HDL cholesterol (HDL-C) in 60% cases (1.0±0.2

mmol/L). Most patients had consequently highly atherogenic type II hyperlipidemia subtypes: IIa - 60%, IIb - 40%. We also found direct correlation of TC with age, overweight. The duration of RA also has significant direct correlation with TC (r=0.189) and LDL-C (r=0.159). RA activity negatively affected HDL-C: level of CRP (r=-0.169). There was negative correlation of CRP with HDL-C (r=-0.169), meaning that RA activization was accompanied by lower HDL-C levels.

Conclusion: The most pronounced change was an increase in TC and LDL-C. The lipid profile in patients with RA is interrelated with traditional (age, increased BMI) as well as associated with the disease (activity and duration of RA) risk factors.

P822

IMPACT OF OSTEOPOROSIS TREATMENT ON QUALITY OF LIFE (QOL) AFTER FRAGILITY FRACTURE

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Objective: Osteoporotic fractures cause complex disability, significant morbidity, reduction in quality of life (QoL), functional limitations and higher risk for refractures. Beside secondary prevention of fractures, osteoporosis treatment also has been proposed to be effective in improving health-related quality of life. This study aims to assess the impact of osteoporosis treatment on QoL after a fragility fracture.

Methods: This study is based on the Austrian data of the International Costs and Utilities Related to Osteoporotic fractures Study (ICUROS), a multinational observational study assessing the consequences after osteoporotic fractures. Recruitment was performed in 8 different trauma centers throughout Austria. Participants were included after having sustained an osteoporotic fracture, underwent follow-up analysis 4, 12 and 18 months thereafter and were interviewed regarding, inter alia, osteoporosis treatment and QoL using the European Quality of Life-5 Dimensions-3 Levels (EQ5D). This included one question for each of the five dimensions of EQ5D: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. For analysis, patients were divided into 2 groups whether osteoporosis treatment was initiated after the index fracture or not, and differences in QoL was assessed with the chi-squared test using the statistical software package IBM® SPSS® Statistics Version 23.

Results: A total of 922 patients were eligible for analysis. However, at the end of study, there was a loss of follow-up in 396 patients (43.0%). At baseline (time of fracture), the 2 subgroups were comparable except of differences regarding usual activities. At all follow-up analyses, osteoporosis treatment did not result in a significant difference in all assessed dimensions of QoL.

Conclusion: Despite multiple studies demonstrating osteoporosis treatment to be effective in improving QoL, the Austrian data of ICUROS does not support a significant difference in QoL after a fragility fracture whether receiving osteoporosis treatment or not.

P823

DYNAMIC CHANGES OF IL-10 IN PATIENTS WITH RHEUMATOID ARTHRITIS RECEIVING COMBINED TREATMENT

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Objective: To evaluate the dynamic changes of IL-10 in patients with rheumatoid arthritis (RA) treated with infliximab (IF) in combination with methotrexate (MT).

Methods: The study included 18 female patients with RA with mean age 46±8.4 y and mean duration of the disease 13.2±5.3 y. RF positive RA was detected in 83.3%, and ACPA positive - in 66.8% cases. All the patients received MT at a dose of 12.5-20 mg/week (for at least 6 months) in combination with NSAIDs. IF was administered for every patient according to the standard scheme. Measurement of ESR, CRP, IL-10 was carried out before the start of IF and at the 30th week of treatment. Serum IL-10 concentrations were measured by ELISA. Disease activity was evaluated using DAS28-CRP(4).

Results: All the patients had high RA activity based on DAS28-CRP(4) score. In most cases there was a positive shift of clinical and laboratory manifestations after 5 infusions of IF along with an improvement in quality of life. An overall decrease of all disease activity markers was also noted at this timepoint. When studying the correlation between the serum levels of IL-10 and markers of inflammation in patients with RA, the presence of weak negative relationships between an increase in the value of IL-10 and DAS28-CRP(4) (r=-0.38) was established. The partial markers of disease activity also had significant correlations with IL-10: the number of swollen joints (r=-0.22), the number of tender joints (r=-0.47), ESR (r=-0.12), CRP (r=-0.08). A tendency toward a decrease in mean serum IL-10 levels by the 30th week of treatment was revealed (which is apparently due to systemic immunosuppression effect).

Conclusion: By the 30th week of treatment with combined therapy of IF and MT a decrease in the concentration of IL-10 was found. Practical consideration of application of IL-10 as a biomarker of RA treatment needs data accumulation about entire pattern of cytokine changes.