

Objectives: The objective of our study was to determine the prevalence of these affections during crohn's disease and to identify the risk factors for osteopenia and osteoporosis.

Methods: We conducted a descriptive monocentric retrospective study of consecutive patients with crohn's disease who were hospitalized between January 2016 and December 2018.

Results: We included 100 patients (64 female and 36 male) with an average age of 37 years [17-68 years]. Among these patients 21% were smokers and among women 20% were in menopause. Bone densitometry was performed in 39 patients. It was found to be pathological in 53.8% of cases. The rate of osteoporosis was 17.9% (7 patients) and the rate of osteopenia was 35.9% (14 patients). Tobacco and a BMI of less than 18 had a statistically significant association with osteopenia ($p=0.046$; $p=0.038$ respectively). The presence of a family history of IBD had a statistically significant influence on a pathological bone densitometric investigation ($p=0.036$). An albuminemia rate of less than 35g/dl had an association at the limit of significance with bone pathology in BMD ($p=0.059$).

Conclusion: Osteoporosis and osteopenia are frequent during crohn's disease. They are in the majority of cases asymptomatic. This makes bone densitometry essential, especially in the presence of a family history of IBD, smoking and malnutrition (BMI less than 18) in order to act early and avoid complications such as fractures.

Disclosure of Interests: None declared

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AB0854 **PERSPECTIVES OF WOMEN WITH EXPERIENCE OF A FRAGILITY FRACTURE IN EUROPE: ATTITUDES TOWARDS FUTURE FRACTURE RISK, OSTEOPOROSIS AND PHARMACOTHERAPY**

Charles Chaine¹, Peter Ray¹, Jen Timoshanko². ¹AplusA, London, United Kingdom; ²UCB Pharma, Slough, United Kingdom

Background: Fragility fractures (FF) are common in women >50 years (yrs), with 1 in 3 experiencing a fracture (Fx).¹ However, the cause of these Fx is poorly recognised and measures taken to prevent future Fx are often inadequate. Recent US patient (pt) survey data suggest that awareness of osteoporosis (OP) and its contribution to Fx risk, appreciation of the benefits of OP pharmacotherapy (Rx), and discussion about OP with healthcare professionals (HCPs) are limited.²

Objectives: This study gained insight into the attitudes and experiences of post-FF women in Europe regarding future Fx risk management.

Methods: Women ≥51 yrs from Germany (DE), Spain (ES), UK, France (FR) and Italy (IT) (EU5) with self-reported experience of a FF completed a 30-min online survey (AplusA; 13–20 Feb 2018). Data are reported for EU5 pts who had their first Fx at ≥50 yrs; pts whose first Fx was a hand/finger or ankle/foot/toe Fx were excluded.

Results: 199 women participated (DE: 38; ES: 36; UK: 41; FR: 34; IT:50). The most commonly experienced Fx was of the lower arm/wrist (43%). 43% reported >1 Fx (any type). Most women discussed bone health with an HCP within 6 months (mo) (70%; 42% with a GP) and HCPs were their primary source of information on OP (85%). Around a third reported taking a DEXA test within 6 mo of their first FF (37%). Advice from HCPs to prevent Fx focused on calcium/vitamin D supplements (74%) and diet/exercise changes (54%); 46% were prescribed OP-Rx. After having a FF, around half worried about future Fx (51%) and 39% voiced concerns about their general health (Figure). A third of pts thought that OP had caused their Fx (33%), most were likely to attribute it to a fall (67%). Only 18% felt empowered to manage their bone health; 61% did not think OP-Rx reduces risk of Fx or were unsure. 97% had never joined a support group.

Conclusion: These results indicate that pts discuss future Fx risk with an HCP soon after having a FF and are concerned about future Fx. However, low levels of DEXA testing and OP-Rx, and poor awareness of the link between OP and Fx risk remain. Better education to empower women at risk of FF is critical.

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AB0855 **FACTORS ASSOCIATED WITH ADHERENCE TO OSTEOPOROSIS TREATMENT IN PATIENTS WITH RHEUMATIC DISEASES**

Oxana Nikitinskaya, Natalia Toroptsova. V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Background: Patients with rheumatic diseases (RD) have an increased risk of developing osteoporosis (OP) and fractures compared with healthy population due to chronic inflammation, low physical activity and using some kind of medications. Persistence and adherence to OP therapy are important factors in achieving successful outcomes in fracture reduction.

Objectives: To identify the factors affecting persistence and adherence to OP therapy in patients with RD

Methods: We conducted observational study of 196 RD (150 - with rheumatoid arthritis and 46 - with systemic sclerosis) patients aged 50 years and older (96% women, mean age 61±9 years) with OP. Persistence and adherence were assessed 3 years after OP therapy initiation. The patients kept a diary on osteoporosis therapy. The information was collected during the visits to the doctor or from telephone contact with the patient every year.

Results: During 3 years 32% of patients received zoledronic acid, 27% - alendronate, 16% - denosumab, 12%- ibandronate, 5% - alfacalcidol, 3% - strontium ranelate, 1% - teriparatide, 3% - calcium and vitamin D. 45 (23%) persons were switched from one antiosteoporotic medication to another due to physician's recommendation. 123 patients (63%) were persistent with OP therapy, including 78% of those who received zoledronic acid, 75% - denosumab, 60% - oral bisphosphonates, 53% - among those, who switched OP therapy during follow up period. The most common reason for interruption or discontinuation of OP treatment was poor tolerance (33%). Persistence in patients with RD was associated with determination of vitamin D level (OR =3.84, 95%CI 1.91-7.72, $p=0.0001$), 10 years fracture risk assessment (FRAX[®]) (OR=3.9, 95%CI 1.4-10.9 $p=0.006$), annual BMD measurement (OR=2.19, 95%CI 1.08-4.42, $p=0.028$), quantity of biochemical blood tests ($p=0.0043$) and visits to the doctor ($p=0.003$). Age, education, marital status, income level, duration of disease, educational brochures and lectures on OP, previous fractures, hip fractures in parents, the number of comorbidities, the total number of taken medications did not affect adherence and persistence to OP treatment.

Conclusion: 63% of patients with RD and OP received antiosteoporotic medication during 3 years. Assessment of serum vitamin D level and FRAX score, monitoring of OP therapy with annual DEXA, blood biochemical markers and regular visits to the rheumatologist associated with increased persistence with OP treatment in RD patients.

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AB0856 **RISK FACTORS OF CIRRHOSIS- RELATED OSTEOPOROSIS**

Nouha Trad, Dhilel Issaoui, Hela Kchir, Sabrine Soua, Hatem Chaabouni, Nadia Maamouri. hospital of La Rabta Faculty of medicine of Tunis, Gastroenterology, Ariana, Tunisia

Background: Osteoporosis, that may lead to a high risk of fractures and compromises quality of life, is the main bone disturbance among cirrhotic patients. Despite that, it tends to be under-diagnosed.

Objectives: To determine frequency of osteoporosis and identify risk factors associated among cirrhotic patients.

Methods: We performed a retrospective analysis of data from consecutive cirrhotic patients recruited from **January 2010 to December 2017** and who had at least one bone mineral density measurement (BMD). By definition from the World Health Organization, osteoporosis is defined by bone densitometry as a T score < -2.5 and osteopenia as a T score between -1 and -2.5.

Results: 227 patients with an average age of 65.5 years [24-90] were included. Thirty one had a BMD: ten patients with HCV-related cirrhosis (HCV), seven patients with HBV-related cirrhosis (HBV) and 14 patients with autoimmune liver disease (eight cases of primary biliary cholangitis (PBC), two cases of primary sclerosing cholangitis (PSC), two cases of autoimmune hepatitis (AIH) and two cases of overlap syndrome (PBC +AIH)). Osteopenia was observed in seven patients (22.5%): three cases of HCV, two cases of PSC and two cases of overlap syndrome. 17

patients had an osteoporosis (54.8%): six cases of HCV, three cases of HBV, five cases of PBC, two cases of AIH and one case of PSC. Osteoporosis is most common in postmenopausal women with significant correlation ($p < 0.001$). Hyperbilirubinaemia and increased Gamma Glutamyl Transferase (GGT) were significantly correlated with osteoporosis ($p < 0.05$). However, there was no significant correlation between osteoporosis and body mass index or the Child-Pugh score.

Conclusion: In our study, 54.8% of cirrhotic patients who have had a BMD, had an osteoporosis. It was more frequent among postmenopausal women with hyperbilirubinaemia and increased GGT. The systematic realization of BMD in these patients could contribute to better management.

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AB0857 DENSITOMETRY VALUES CHANGE WHEN STOPPING DENOSUMAB

Urionaguena Irtati¹, P Sandra. Chinchilla Gallo², Sandra Hernandez Gomez¹, Jose Francisco Garcia Llorente¹, Izaskun Aizpurua Manso¹, Nuria Vegas Revenga¹.

¹Galdakao-Usansolo Ospitalea, Rheumatology, Galdakao-Usansolo, Spain;

²University of the Basque Country, Bilbao, Spain

Background: Denosumab (DMAB) withdrawal without subsequent bisphosphonate treatment seems to be related to a rebound effect: a rapid decrease in mineral density in bone densitometry (DEXA). However, evidence is scarce.

Objectives: To analyze DEXA values in patients who have stopped DMAB without subsequent treatment and to detect possible factors associated.

Methods: Unicentric observational study. We included patients with osteoporosis (OP) who attended our rheumatology clinic from May 2017 to December 2018, who had stopped DMAB without any further treatment. Demographic data, risk factors for OP (smoking, age of menopause, previous fractures, chronic corticotherapy), data related to calcium and vitamin D analogues supplementation, previous OP treatment and duration of active treatment with DMAB were collected; as well as DEXA data (last DEXA while on DMAB and immediate DEXA after its withdrawal, no more than 3 years later). For the statistical analysis, means, standard deviations, frequencies and percentages are reported accordingly. Paired Student's T test has been used to analyze medias in both DEXAs, and chi square for comparisons when appropriate.

Results: 39 patients (38 women) age 70.17 ± 4 , menopause at 46 ± 4.07 years, 37(94%) never used tobacco, 25 (64%) suffered some fracture before treatment with DMAB, 17(43%) received previous bisphosphonates, 5 (13%) teriparatide and 7(18%) strontium ranelate. The average duration of DMAB use was 2 ± 0.86 years, onset at 61 ± 7.34 years. Standard deviations (T score) of DEXA values worsened significantly ($p < 0.001$) in all the locations: femur -0.28 (IC95% -0.36 to -0.19), columnL1 -0.43 (IC95% -0.30 a - 0.56), columnL2 -0.44 (IC95% -0.25 to -0.62) columnL3 -0.40 (IC95% -0.22 to -0.59) columnL4 -0.52 (IC95% -0, 33 to -0.72) columnL1-L4 -0.48 (IC95% -0.33 to -0.64) (table 1). We analyzed the decrease in T-scores alongside the other variables, obtaining a proportionally inverse relation between duration of DMAB use and this reduction (table 2). Given that DMAB use in one patient was several standard deviations above the mean (12 yrs), her data were excluded for analysis.

Conclusion: DMAB withdrawal without subsequent antiresorptive treatment produces a rapid decrease in DEXA values in our patients. This phenomenon appears to diminish in patients who have received DMAB for a longer period.

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Abstract AB0857 Table 1. Comparison T-score DEXA previous to DMAB withdrawal (1st DEXA) and afterwards (2nd DEXA)

	Mean T-score \pm SD* 1 st DEXA	T-score Media \pm SD* 2 nd DEXA	Media difference between 1 st and 2 nd DEXA
Total	-1.46 \pm 0.85	-1.74 \pm 0.87	-0.28*
Femur			
Column L1	-2.16 \pm 0.82	-2.59 \pm 0.75	-0.43*
Column L2	-2.42 \pm 0.81	-2.87 \pm 0.75	-0.44*
Column L3	-2.01 \pm 0.82	-2.42 \pm 0.89	-0.40*
Column L4	-2.04 \pm 1.10	-2.57 \pm 1.06	-0.52*
Column L1-L4	-2.12 \pm 0.76	-2.61 \pm 0.71	-0.48*

* $p < 0.001$ *SD: Standard deviation

Abstract AB0857 Table 2

YEARS ON DMAB DIVIDED INTO TERTILES * COLUMN L1 L4 SD DIFFERENCE IN TERTILES Crosstabulation

			Difference L1 L4 in tertiles			Total	
YEARS ON DMAB DIVIDED INTO TERTILES	-0.60 and more to -0.30	-0.59 to -0.29 and less	Count	7	5	1	13
			% within Difference L1 L4 in tertiles	46.7%	50.0%	10.0%	37.1%
	1.96-2.38		Count	3	5	3	11
			% within Difference L1 L4 in tertiles	20.0%	50.0%	30.0%	31.4%
	2.39 or more		Count	5	0	6	11
			% within Difference L1 L4 in tertiles	33.3%	0.0%	60.0%	31.4%
Total			Count	15	10	10	35
			% within Difference L1 L4 in tertiles	100.0%	100.0%	100.0%	100.0%

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AB0858 MAINLY MEN, AND OLDER PEOPLE, WITH FRAGILITY HIP FRACTURE DO NOT RECEIVE ANTIOSTEOPOROTIC TREATMENT

Paloma Vela-Casasempere^{1,2,3}, Marta Elvira², Antonio Palazon Bru², Silvia Gomez-Sabater³, Rocio Caño-Alameda³. ¹ALICANTE UNIVERSITY GENERAL HOSPITAL, RHEUMATOLOGY, ALICANTE, Spain; ²Miguel Hernandez University, Clinical Medicine, San Juan, Spain; ³ISABIAL, Alicante, Spain

Background: Osteoporotic hip fractures have a profound impact on the physical health and psychosocial wellbeing of patients, with considerable economic implications. More than 20% of individuals experience a subsequent hip fracture in the following year (1,2). Although there are effective treatments in the prevention of fractures, the proportion of patients who start treatment after a fragility fracture is low, having decreased in recent years (3).

Objectives: The aim of the study is to know the percentage of patients who received medical treatment for osteoporosis after a fragility hip fracture in our health department. Secondary, we want to know the mortality and re-fracture rates two years after the fracture.

Methods: Cross-sectional retrospective observational study. Patients discharged during 2015 with diagnosis of "Fragility Hip Fracture" were reviewed, data collected through electronic medical record. Variables: sex; age; age and date of death; treatment (calcium, vitamin D or antiosteoporotic drugs) before and after discharge; Fragility fracture before and after hospital discharge. Statistical methods: absolute and relative frequencies for qualitative variables, means and standard deviations for quantitative. Associations between variables were studied using Chi square and T-student test.