Recent evidence supports starting bisphosphonate in the acute post-fracture period.[3]

Objectives: To investigate the characteristics and treatment of patients admitted with fragility fracture of the hip.

Methods: This is a retrospective study on all patients admitted with fragility fracture of the hip throughout 2018, included in the hospital registry. Data collected included patients' characteristics, place of falls, types of fracture, in-patient surgical treatment and medical treatment prescribed up until one year follow-up. Outcome of hospitalisation were reported as alive, death and at-own-risk discharge. Continuous and categorical data were described using mean (±SD) and no of patients (%). Comparison of continuous data was performed using student t-test.

Results: One-hundred and sixty-seven patients were admitted with fragility fracture of the hip. There were 44 (26.3%) male and 123 (73.7%) female patients, with a mean age of 77.1(±9.8) years. Male patients were significantly younger compared to female patients [73.1(±10.5) years vs 78.5(±9.1) years, p=0.002]. Eighty-six (51.5%) patients were Chinese, followed 57 (34.1%) Malay and 24 (14.4%) Indian patients. Chinese patients were significantly older than Malay patients [80.4(±8.2) years vs 74.6(±9.8) years, p<0.001] and Indian patients [80.4(±8.2) years vs 71.0(±10.5), p<0.001].

Most patients, 96 (57.5%) fell within the vicinity of their homes while the other 26 (12.7%) patients fell outside of their home. The place of fall was not documented for 45 (26.9%) patients. The types of fractures were neck of femur in 70 (41.9%), inter-trochanteric fracture in 93 (55.7%) and subtrochanteric in 4 (2.4%) patients.

Of 167 patients, 100 (59.9%) patients underwent surgical treatment and 67 (40.1%) patients were treated conservatively. The prescription of calcium and vitamin D was significantly higher in female patients (Table 1). Of 167 patients, 148 (88.6%) were discharged home, 12 (7.2%) patients died during hospital admission and 7 (4.2%) patients opted for at-own-risk discharge.

Table 1. Treatment prescribed to patients admitted with fragility fracture of the hip.

Treatment		Male, no of patients (%)	Female, no of patients (%)	p-value
Surgery	Yes (n=100)	30 (30)	70 (70)	0.209
	No (n=67)	14 (20.1)	53 (79.1)	
Calcium	Yes (n=91)	18 (19.8)	73 (80.2)	0.035
	No (n=76)	26 (34.2)	50 (65.8)	
Vitamin D	Yes (n=88)	16 (18.2)	72 (81.8)	0.011
	No (n=79)	28 (35.4)	51 (64.6)	
Bisphosphonate	Yes (n=13)	0	13 (100)	NA
	No (n=154)	44 (28.6)	110 (71.4)	

Conclusion: There was a high proportion of female patients admitted with fragility fracture of the hip. Majority of patients were Chinese, who were significantly older compared to Malay and Indian patients. We found a low prescription of osteoporosis medications for patients following fragility fracture of the hip. The care of osteoporosis can be improved through multidisciplinary approach.

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AB0627 THE EFFECT OF BIOLOGICALLY ACTIVE FOOD SUPPLEMENT WITH CALCIUM AND VITAMIN D3 ADMINISTRATION ON CALCIUM HOMEOSTASIS AND FALLS INCIDENCE IN PATIENTS WITH HIGH FRACTURE RISK UNDERGOING MEDICAL REHABILITATION

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Background: Vitamin D and calcium deficiencies is of particular importance in older patients undergoing medical rehabilitation and having a high risk of fractures. Preventing falls and fractures, including during the course of rehabilitation, is an important challenge that can be addressed in these patients, in particular through improved nutrition and vitamin D and calcium supplementation.

Objectives: to evaluate the effect of long-term calcium and vitamin D3 intake on calcium homeostasis and fall's rate in patients with high fracture risk starting rehabilitation course.

Methods: The study enrolled 119 men and women aged 50-80 y.o. with high absolute fracture probability by FRAX who started medical rehabilitation. 41 patients have been receiving antiresorptive therapy already comprised group 1, other patients were randomized into groups 2 (n=39) and 3 (control, n=39). In groups 1 and 2, a food supplement containing calcium citrate 1000 mg and vitamin D3 600 IU was prescribed for 12 months. All patients undergo laboratory examination, food calcium intake and fall assessment at baseline, in 6 and 12 months.

Results: Daily calcium intake in the study sample (n=119) was 782.9±243.4 mg. Vitamin D deficiency was detected in 38.4% of the examined. An increase in 25(OH)D level was noted in groups 1 and 2 after 6 and 12 months (p<0.01). Patients in group 1 showed an increase in serum osteocalcin and calcium levels after 6 and 12 months (p<0.05). In group 3, there was an increase of immunoreactive parathyroid hormone levels after 6 (p<0.05) and 12 months (p<0.01), C-terminal telopeptide of type I collagen level and alkaline phosphatase activity after 12 months (p<0.05). In group 1, there was also a decrease in proportion of patients who fell after 6 months ($\chi 2$=4.97, p=0.026) and a decrease in the total number of falls after 12 months ($\chi 2$=4.89, p=0.027). Group 2 showed a decrease in the number of patients who fell after 6 and 12 months ($\chi 2$=48.58, p=0.0034 at both stages of the study) and the number of falls in general after 6 months ($\chi 2$=6.02, p=0.0142).

Conclusion: The obtained data allow us to recommend prescription of dietary supplements containing calcium and vitamin D3 as a part of complex rehabilitation of patients with high fracture risk.

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Crystal diseases, metabolic bone diseases other than osteoporosis

AB0628 PRE-INFUSION GLUCOCORTICOID ELIMINATION IN PATIENTS WITH UNCONTROLLED GOUT TREATED WITH PEGLOTICASE: A CASE SERIES

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Background: Pegloticase is indicated for treating uncontrolled gout, but some patients develop anti-drug antibodies that have been associated with a loss of efficacy and infusion reactions (IRs).[1] Per the pegloticase prescribing information, pre-infusion medications, including glucocorticoids (GCs), should be given to minimize IR risk.[2] Given that GCs have a significant side effect profile and patients with uncontrolled gout generally have multiple comorbidities,[3,4] minimizing steroid exposure is desirable.

Objectives: The current case series examines a community rheumatology practices' experience with pre-infusion GC elimination in uncontrolled gout patients treated with pegloticase.

Methods: This retrospective chart review was conducted at a rheumatology practice that discontinues pre-infusion GC use in patients treated with pegloticase. Patients treated from 2016-2020 who had pre-infusion GCs discontinued during therapy were included. Pre-infusion prophylaxis at this practice includes methylprednisolone (125 mg IV), diphenhydramine (50 mg oral + 12.5 mg IVP), famotidine (40 mg oral), and acetaminophen (1000 mg) administered immediately before infusions. All other IR prophylaxis continued when GCs were stopped without tapering. Demographics, number of pegloticase infusions, and safety (adverse events [AEs], clinical lab values) were examined. Patients self-managed gout flares with oral methylprednisolone (24 mg then 5-day taper).

Results: Nine patients (8 male) with tophaceous gout met inclusion criteria. Mean age was 72.3 ± 6.9 years (65-84 years), mean BMI was 28.7 ± 5.6 kg/m^2, and mean pre-therapy serum uric acid (sUA) was 7.3 ± 2.7 mg/dL (3.9-12.7 mg/dL). Two patients were co-treated with oral methotrexate (15 and 20 mg/week) and one patient was on hemodialysis. Most common comorbidities included osteoarthritis (9 patients), hypertension (8 patients), chronic kidney disease (5 patients), kidney stones (5 patients), and diabetes (5 patients). A median of 27 pegloticase infusions (range: 9-84) were administered, with 8 of 9 patients receiving ≥12 infusions. Median number of infusions before and after initial GC