Conclusion SOS, BUA and Stiffness were all strongly associated with vertebral deformities in RA patients. QUS might be an independent predictor for vertebral deformities, but this need to be evaluated in larger, prospective studies.

SAT0150 MISSED DIAGNOSIS AND TREATMENT OF OSTEOPOROSIS IN ELDERLY PATIENTS WITH HIP FRACTURE

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Background Physicians can recognise and treat osteoporosis before the occurrence of fracture. Unfortunately, there is ample evidence that clinicians have not heard or heeded the message that condition is treatable, and that selected patients, particularly those who have already suffered a fracture, should be counselled to received preventive therapy.¹ Epidemiologic studies have demonstrated that a history of osteoporotic fracture places a patient at very high risk of future fractures.²

Objectives The purpose of this study was to investigate whether elderly patients admitted to our hospital with a principal diagnosis of hip fracture had a prior diagnosis of osteoporosis or a previous osteoporotic fracture and their previous prescribed treatment.

Methods We performed a prospective chart review of all elderly (> = 65 years) patients admitted with the diagnosis of acute hip fracture in a public hospital in Barcelona, Spain, from January 1, 1999, to December 31, 2000. Data were collected by interviewing each patient immediately after their fracture with a structured questionnaire including patient age, sex, residence, the number, type and causes of fractures, as well as previous history of osteoporosis or osteoporotic fracture, and previous treatment for osteoporosis.

Results A total of 741 patients were included. Mean age was 81.54 (range 65–103) and 74.14% were women. Six hundred seven (81.91%) patients were admitted from their own home. Thirty (4.05%) patients had other associated fracture; the most common was a subcapital humeral fracture, which occurred in 13 patients. There were 447 (60.32%) extracapsular fractures. A fall was the most common cause of hip fracture (94.87% of cases). A prior diagnosis of osteoporosis was recorded in 50 (6.74%) patients; of them 23 (46%) were using calcium, vitamin D, alendronate or calcitonin. A history of hip, vertebral, wrist or another osteoporotic fracture, was recorded in 221 (29.82%) patients but only 18 (8.14%) were using any treatment for osteoporosis. Moreover 66 patients (8.91%) had suffered from more than one fracture. Forty-seven patients (6.34%) were on long term systemic steroids treatment for 6 months or more; ten (21.28%) were treated with calcium, vitamin D, alendronate or calcitonin. Eight patients admitted with a hip fracture in 1999 had a second hip fracture in 2000, but only two were receiving preventive therapy.

Conclusion Rates of utilisation of pharmacological treatment for osteoporosis were low. Prior diagnosis of osteoporosis was the condition that implied a better (less than half) preventive treatment, but clinicians do not consistently initiate treatment for skeletal fragility after one or more fractures had occurred.

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SAT0151 DIAGNOSTIC CRITERIA OF OSTEOPOROSIS IN PATIENTS WITH RA

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Background We reported that generalised bone loss was observed in rheumatoid arthritis (RA), especially in post menopausal patients and closely correlate with the activity of RA. On the other hand, glucocorticoids are used in the treatment of active patients with RA. Osteoporosis and related fractures are one of the most serious adverse effects of glucocorticoids.

Objectives Recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis were proposed by American College of Rheumatology and UK Consensus Group. On the other hand, the diagnosis of osteoporosis in patients with RA was usually made by the diagnostic criteria of primary osteoporosis. The purpose of the present study was to clarify the validity of using the diagnostic criteria of primary osteoporosis for the diagnosis of osteoporosis in RA.

Methods The cutoff values were defined as the value by which the subjects with spine fracture were discriminated from those without spine fracture efficiently in terms of sensitivity and specificity. The subjects and measurement of bone mineral density (BMD) were follows: number of subjects; 256 (47 with vertebral fracture, 219 without vertebral fracture), age of subjects (mean $\pm$ SD); fracture group 64.2 ± 9.0 years, non fracture group 59.8 ± 10.9 years, measured site (type of machine); lumbar spine (QDR). Patients treated with glucocorticoid were follows: number of subjects; 103 (29 with vertebral fracture, 74 without vertebral fracture), Age of subjects (mean $\pm$ SD); fracture group 65.1 ± 12.5 years, non fracture group 54.2 ± 13.6 years.

Results The cutoff value of all patients with RA was 0.711 g/cm^2 (T score: -2.6, % of the young adult mean (%YAM): 70%). This value was almost same as the cutoff value (BMD: 0.708 g/cm^2 , %YAM: 70%) of osteoporosis proposed by the Japanese diagnostic criteria of primary osteoporosis and as the cutoff value (T score below -2.5) of osteoporosis proposed by the WHO diagnostic criteria. On the other hand, the cutoff value in the patients treated with daily doses of 7.5 mg or more prednisolone was 0.812 g/cm^2 (T score: -1.7, %YAM: 80%). This value was almost same as the value of osteopenia by the Japanese diagnostic criteria (%YAM below 80%) and by the WHO diagnostic criteria (T score below -1.0).

Conclusion These results supported the validity of using the diagnostic criteria of primary osteoporosis for the diagnosis of osteoporosis in patients with RA. But, in patients treated with daily doses of 7.5 mg or more prednisolone, we have to start the treatment for preventing bone loss, if the patients are diagnosed for osteopenia using the diagnostic criteria of primary osteoporosis.