3 etidronate, 2 calcium and vitamin D supplements and 5 calcium supplements alone). None of the men were taking any medication for osteoporosis, a difference in comparison to women of borderline significance ($p = 0.055$, Fisher's Exact Test).

Conclusion Only a small minority of patients with low energy fractures were made aware of the possibility of having osteoporosis and were adequately investigated or treated. Men accounted for 17% of presentations, but the complete absence of advice and appropriate investigation and treatment of osteoporosis among males is striking. There is much scope for improvement in the management of low energy fractures, especially in men. A reverse of the Yentl syndrome may exist in osteoporosis.

REFERENCES

- 1 Healy B. The Yentl syndrome. *N Engl J Med*. 1991;**325**:274–6
- 2 Wigderowitz CA, Rowley DI, Mole PA, et al. Bone mineral density of the radius in patients with Colles' fracture. *Br J Bone Joint Surg*. 2000;**82B**:87–9
- 3 Nyquist F, Gardsell P, Sernbo I, et al. Assessment of sex hormones and bone mineral density in relation to occurrence of fracture in men. *Bone* 1998;**22**:147–51

SAT0182 ASSESSMENT OF BONE METABOLISM IN PATIENTS WITH CHRONIC CONNECTIVE TISSUE DISEASES

I Korcowska, P Leszczynski, P Hrycaj, JK Lacki. *Department of Rheumatology and Clinical Immunology, University School of Medicine, Poznan, Poland*

10.1136/annrheumdis-2001.669

Background

Objectives The aim of our recent study was to evaluate bone metabolism in rheumatoid arthritis (RA) and systemic lupus erythematosus patients (SLE).

Methods 306 women (90 RA, 38 SLE patients and 178 healthy volunteers) were involved in the study. All SLE and 44 RA patients were on chronic glucocorticosteroids therapy (GCS). Average age was: 46.4 ± 12.8 yrs, 52.0 ± 12.0 yrs in SLE group and the control (respectively). Disease duration and duration of GCS therapy in SLE patients was: 108 ± 82 months. Total dose of GCS was the highest in SLE pts (25.3 ± 28.19 g). Patients with RA were divided into two groups: treated with GCS (average age: 52.5 ± 12.4 yrs, disease duration and duration of GCS therapy: 122 ± 102 months, total dose of GCS: 7.4 ± 8.3 g); and who were not treated with GCS (average age: 54.3 ± 9.7 yrs, disease duration: 134 ± 120 months). In all patients the following markers of bone metabolism were measured: osteocalcin, procollagen C, alkaline phosphatase-bone fraction, carboxyterminal telopeptides of type I collagen (CTX), procollagen type I carboxyterminal propeptide (PICP), deoxypyridinoline. The disease activity was assessed by measuring serum levels of proinflammatory cytokines (IL-1a, IL-6, TNF-alpha, GM-CSF) and acute phase markers (ESR, CRP, AGP, AGP-RC, ACT).

Results Concentration of biochemical markers of osteoporosis suggesting increased bone metabolism in RA patients indicates significantly higher bone loss in this group than in SLE patients in spite of the highest dosage of GCS. There was no significant differences between bone turnover in RA patients treated and not treated with GCS.

Conclusion The serum levels of proinflammatory cytokines and acute phase markers confirm the highest stage of the disease activity in RA patients.

SAT0183 BONE MINERAL DENSITY IN WOMEN WITH RHEUMATOID ARTHRITIS

AN Dimic, V Radenkovic, S Milenkovic, Z Markovic, A Stankovic. *The Institute for Prevention, Treatment and Rehabilitation of Rheumatic and Cardiovascular Diseases, Niska Banja Institute, Niska Banja, Yugoslavia*

10.1136/annrheumdis-2001.670

Background Rheumatoid arthritis (RA) has a significant influence on bone loss in both peripheral (juxtaarticular osteoporosis) and axial skeleton. Glucocorticoids (GC) are often used in the therapy of RA and contribute significantly to favourable disease outcome but have been accused to cause a bone loss in these patients.

Objectives To assess the influence of GC on the occurrence of osteoporosis in RA patients.

Methods Hundred and seven women with RA were evaluated. They were divided in two age-groups: 40–49 and 50–59. The assessment of bone mineral density was performed by dual energy x-ray absorptiometry (DEXA), using Lunar DPX densitometer. Anterior-posterior spine scan of lumbar vertebrae L1–L4 was performed.

Results The following average values of bone mineral density (BMD) were found: 1.116 g/cm^2 for age-group of 40–49 and 0.942 g/cm^2 for 50–59 years old patients. In comparison with control group (300 healthy women of the same age-groups) we found significantly lower BMD in RA patients ($p < 0.05$ for the age group of 40–49 and $p < 0.001$ for age-group of 50–59).

Annual rate of bone loss in both control and group of RA patients was also evaluated. In the control group annual loss was 0.57%, and in group of RA patients 1.45% ($p < 0.001$).

In RA patients treated with GC significantly lower BMD in comparison with RA patients not taking these drug was found.

Abstract SAT0183 Table 1

Age	RA without GC g/cm ²	RA with GC g/cm ²	p
40–49 years	1.129 ± 0.104	1.066 ± 0.104	< 0.05
50–59 years	0.965 ± 0.136	0.897 ± 0.112	< 0.05

Conclusion Osteopenia defined as BMD below one standard deviation from the corresponding young adult normal value was found in 26% of RA patients aged 40–49 and in 45% RA patients aged 50–59.

In conclusion this study has confirmed that the disease itself, therapy with glucocorticoids and oestrogen deficiency during menopause influence bone loss in RA patients.

Diagnostics and imaging procedures

AB0193 ELECTROMYOGRAPHY AND NERVE CONDUCTION IN PATIENTS ON REGULAR HAEMODIALYSIS

AF El Ghobarey, W Kamel, E Abdel Mobdy. *Internal Medicine, Al Azhar University, Cairo, Egypt*

10.1136/annrheumdis-2001.671

Background