OSTEOPOROSIS IN PRIMARY CARE – ARE WE MISSING A TRICK?

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Background: Globally various incentive schemes have been employed in primary care to improve early diagnosis and management of several rheumatic conditions. In the UK, the Primary Care Quality and Outcomes Framework (QOF) rewards general practices for the provision of ‘quality care’ and helps to fund further improvements in the delivery of clinical care. Currently, there is one quality indicator in place for secondary prevention of osteoporosis. In order to help establish an integrated care pathway encompassing the whole patient journey between primary and secondary care, we undertook a detailed survey of two GP practices.

Objectives: The aims of the exercise were to identify the utility of quality indicator and any gaps in the model of care for the high-risk osteoporosis patients.

Methods: An independent service evaluation tool was employed to interrogate the IT system used in the GP surgeries. All patients over the age of 65 were extracted from the database and FRAX analysis was undertaken. Those with medium to high FRAX score (i.e. ten-year risk of >20% for major osteoporotic fracture and/or >5% for hip fracture) were captured to explore whether they were offered further evaluation and bone-sparing therapy as necessary.

Results: Of 18,248 patients registered in the multi-cultural urban practices, 6796 were >65 years old. 793 had pre-defined moderate-high FRAX score. 300 (37%) had a confirmed diagnosis of osteoporosis. Median age was 78 (range 65-103 years). 249 (83%) were women. 88.5% were White and remaining of other ethnicities. Of the 27 patients not receiving any treatment, 11 (30%) were incorrectly coded. The remainder’s reasons for lack of treatment include intolerance, poor adherence and comorbidities.

Conclusion: This study highlights the inadequacy of quality indicators in the overall management of osteoporosis burden in primary care. It relies heavily on active identification process for high-risk individuals and correct coding of fragility fracture. However the vast majority of patients with moderate-high risk, based on case finding strategy advised by international bodies e.g. FRAX, remain hidden. Less than 10% of patients with confirmed osteoporosis fulfil the quality outcome in this survey. The QOF hence fails to reflect the nature of disease burden in the primary care thereby risking the management strategies skewed towards too small a cohort and missing the big picture. It is clear that quality indicators for osteoporosis need to be aligned to risk stratification model. This will allow better identification of at-risk individuals and improved care pathway for patients requiring bone active therapies.

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FRIO497 TRABECULAR BONE SCORE AND MALNUTRITION IN A COHORT OF SYSTEMIC SCLEROSIS PATIENTS

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Background: Systemic sclerosis (SSc) is a connective tissue disease characterized by initial microvascular damage, immune system activation and progressive fibrosis of the skin and internal organs. Gastrointestinal (GI) involvement induce malnutrition due to gastrointestinal symptoms, GI dismotility and malabsorption that are related to fibrosis of bowel wall and bacterial overgrowth(1). Therefore the disease is associated with secondary osteoporosis with a few studies evaluating the bone microarchitecture(2).

Objectives: To evaluate a relationship between malnutrition and bone microarchitecture detected by trabecular bone score (TBS) in SSc patients.

Methods: 38 patients(6 male and 32 female) fulfilling ACR 2013 criteria for SSc underwent DXA to detect quantitative lumbar spine bone mineral density and TBS. DXA also assess body composition with a software that provides the physician quantitative parameters, including free fat mass index (FFMI), that identifies the patient with malnutrition(values <15 kg/m2 in women and 17 kg/m2 in men), according to the ESPEN criteria (3). FFMI index was calculated for all SSc patients and every patient completed a diary reporting GI symptoms possibly related to intestinal disbiosis. Fasting blood samples were obtained in order to analyse some biochemical parameters of malnutrition (total proteins(g/L), albumin(g/L), serum total cholesterol(mg/dl) and blood lymphocyte count(N/mm3)).

Results: The mean age of patients was 64.2±11.3 years with mean disease duration 19.2±6.6 years. 36.8% of patients was found malnourished. The univariate analysis showed that only higher age of patients correlated with symptom related to bacterial overgrowth had lower TBS respect to others. By the variation of the following variables(age, disease duration, lymphocyte count). Age explains about 25% of the TBS variance. Older patients had lower TBS. Multiple R-squared variation was applied. The multivariate linear regression was performed with a stepwise approach to select the best group of variables. Some biochemical parameters of malnutrition (total proteins(g/L), albumin(g/L), serum total cholesterol(mg/dl) and blood lymphocyte count(N/mm3)) were used as independent variables. The model with symptom related to bacterial overgrowth had lower TBS respect to patients without(0.08), regardless of other variables(p=0.002). Disease duration, added to the model, further explains about 4% more of TBS and suggest a trend between highest disease duration (regardless of other variables) and higher TBS(p = 0.103). Lymphocyte count added to