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## LETTER TO THE EDITOR

**Postmenopausal women presenting with spinal fractures and the importance of primary care: A case-series**



**Mujeres posmenopáusicas que presentan fracturas vertebrales y la importancia de la atención primaria: un estudio de caso**

Dear Editor:

Osteoporosis (OP) is a condition characterized by loss of bone mass and resistance with increased risk of fractures.<sup>1</sup> Bone deterioration can occur over a number of years without presenting any symptoms. If detected when fracture appear, the disease is already advanced. The most common OP associated fractures sites are hip, spine and wrist. The diagnostic tool to evaluate bone mineral density (BMD) is DEXA (dual energy X-ray absorptiometry) by which nowadays it is possible to applied a new software that quantifies a parameter, reflection of the structural bone condition: Trabecular Bone Score (TBS).<sup>2</sup> TBS is strongly correlated with the number

of trabeculae and their connectivity and negatively with the space between trabeculae. High TBS value means that microarchitecture bone is dense, well connected with little spaces between trabeculae. Conversely, a low TBS value means that the microarchitecture of bone is incomplete and poorly connected with wide spaces between trabeculae.<sup>3</sup>

Osteoporotic fractures represent a major cause of morbidity and disability in elderly, so OP is increasingly a disease of social importance. The general practitioner (GP) plays an essential role for early OP diagnosis, of crucial importance for fractures prevention. We describe clinical, demographic and pharmacological characteristics of post-menopausal women suffering from vertebral fractures attending a primary care center in three years (1st November 2015–1st November 2018). Clinical parameters are shown in Table 1. Attended GP's surgery 1300 patients, 550 males and 750 females, 55% of whom in menopause (412), 21 of them presented an osteoporotic vertebral fracture in these three years (5%).

Only 15% of women with vertebral fracture practiced physical activity and 60% smoked. All theme assumed colecalciferol and (60%) 13 women had a previous OP diagnosis, but due to poor compliance 6 of them had stopped bis-

**Table 1** Clinical parameters of recruited women, including age, menopausal age, type and severity of vertebral fractures (Genant's method) and some risks factors for OP.

Patients (21)	n (%)
Age	60.6 ± 4.2
Nº and type of vertebral fractures	(6) 30% polifractured (8) 40% biconcave (3 mild–3 moderate–2 severe) (12) 60% wedge (5 mild–4 moderate–3 severe) (6) 30% crush (3 moderate–3 severe) (6) 30%
Lactose and/or other intolerance due to intestinal malabsorption	
Family history of fracture	(5) 20%
Previous OP diagnosis	(13) 60%
Back pain	(13) 60%
Smoke	(13) 60%
BMI (kg/m <sup>2</sup> )	25.5 ± 9.3
Drugs	30% OAD 60% AH
Physical activity	(3) 15%
Menopause age	52.6 ± 3.7

OAD, oral anti-diabetic; AH, anti-hypertensive.

phosphonate therapy. Some patients, despite significant differences in terms of BMD, presented similar TBS values. 6 subjects (30%), despite the normal BMD values, suffered atraumatic fractures. Therefore, the quantitative parameter must be integrated with the qualitative one. Moreover major BMI correlated with greater bone fragility and both qualitative and quantitative parameters did not correlate with serum 25OH-VitaminD levels. Vitamin-D alone is not able to prevent OP and reduce fracture risk; it would be important to prevent bone fragility by doing physical activity and abolishing smoking instead. Furthermore, this case-series analysis revealed the poor adherence to anti-absorptive therapy, because OP is a silent disease. As several factors influence risk of fractures, it's important to know validated algorithms for fracture estimation,<sup>4</sup> but even these one present some weak points. Important risk factors are not considered in the most common algorithms, such as the risk of falls, physical activity, 25OH-D deficiency, and some important laboratory tests are not taken into consideration such as bone remodeling markers. This is important to establish the fracture risk threshold to consider for setting the treatment threshold. Is interesting to note that 10% (2) post-menopausal women had never underwent DEXA before the appearance of fracture. So GP role is essential to screen patients for DEXA, to emphasize the importance of lifestyles, to address bone specialist not only patients with densitometric OP diagnosis, but also those who present risk factors for OP in order to keep them under strict control, to immediately start therapy. GP has to note not only the quantitative BMD value, but the qualitative one too. TBS value, in fact, in combination with BMD, increase the number of patients at risk correctly identified. Moreover GP is the only one who can increase awareness of the importance of therapy adherence, because of his strict relationship with patients.

### Financial support

There is not financial support.

### Re: *Presencia de familiares durante la reanimación cardiopulmonar: perspectivas de pacientes, familiares y profesionales de la salud en el País Vasco*



### Re- *Presence of relatives during cardiopulmonary resuscitation: Perspectives of health professionals, patients and family in the Basque Country*

Sr Editor:

En relación con el artículo *Presencia de familiares durante la reanimación cardiopulmonar*, de Tiscar Gonzalez et al.<sup>1</sup>, permitámosse compartir la experiencia expresada en un artículo con tema similar para México<sup>2</sup>, realizado en 90

### Conflicts of interest

There are not conflicts of interest. All authors are responsible for the entire content of the letter.

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pacientes internados y en 90 familiares asistentes, todos mayores de 18 años y con una estancia mayor a 4 horas, elegidos aleatoriamente de la lista de ingresos y que aceptaron informadamente participar, entrevistados en el servicio de urgencias de un hospital de segundo nivel de la seguridad social en la ciudad de Guadalajara, México. Pacientes y familiares en su mayoría mujeres, de escolaridad hasta secundaria, pertenecientes a estratos populares, a quienes se aplicó un cuestionario estructurado basado en utilizando la técnica de listas libres, encontrándose las similitudes y diferencias que se exponen en la tabla 1.

Lo anterior apunta a la posible existencia de un acuerdo cultural compartido entre nuestras poblaciones de pacientes, familiares y profesionales de la salud ante la práctica poco habitual, compleja y contextualizada de la RCP, argumento que puede ayudar para su aplicación y establecimiento como política sanitaria centrada en el paciente<sup>3</sup>.