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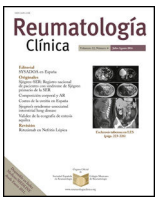

Letter to the Editor

Fracture risk assessment tool (FRAX) re-aim framework

Evaluación del riesgo de fractura (FRAX). Redefinir marco de referencia

Dear Editor:

Osteoporotic fractures represent an important health problem due to their consequences on morbidity, mortality, and the generation of high sanitary costs. Although we have adequate techniques for diagnosis and treatment in order to reduce risk of fracture (RF) we consider that osteoporosis is under diagnosed and therefore undertreated.

The FRAX is an online tool developed by the University of Sheffield (2008), sponsored by the WHO, that calculates the RF from some clinical data, and with which densitometry's values are not indispensible for results.[1] Given the quality of the variables and the methodology used, this tool is highly recommended for the determination of RF, supplying additional information that is independent of bone mineral density,[2] therefore offering a useful tool for identifying high risk patients for opportune treatment, as well as giving options to patients with low risk when indicating a densitometry.[1] However, it has limitations and clinical judgment remains fundamental. It is accepted that the use of FRAX constitutes a valuable algorithm for decision making; the variables to be introduced contain general and other dichotomous data, except the densitometry. The use of steroids is considered as RF and at the moment there is no mention of the possibility of other drugs having a negative impact on bone density; thus, for example, having an inadequate thyroid hormone substitution treatment can increase RF. Furthermore, a recent study concluded that the lowest normal level of TSH and the highest normal level of T4 among euthyroid adults increase RF, suggesting that it is necessary to redefine the optimal ranges of thyroid function tests.[3] SGLT2 drugs (especially canagliflozin), widely used in the control of patients with diabetes mellitus, could have deleterious effects on bone quality and increase RF.[4] Interestingly, the recent publication suggests that anti-diabetic GLP-1 therapy may benefit the growing number of elderly patients with diabetes mellitus, osteoporosis and high RF.[5]

With previous knowledge, our suggestion is that if the patient is using any of these drugs they should add them to the corresponding box, since until now only the use of glucocorticoids was contemplated, and so physicians could consider the FRAX in their clinical decisions. We consider this aspect of great importance since primary hypothyroidism and type 2 diabetes mellitus in our country have a high prevalence and great morbidity and mortality; hence, we must be alert to this possibility and offer our patients optimal follow-up and an approach to perform a true personalized and accurate medicine in the real world.[6] This knowledge should be disseminated in all continuing training courses, and counting medical education programs.

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