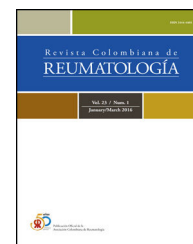




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Editorial

Fragility fracture: Opportunities for proper management[☆]



Fractura por fragilidad: oportunidades para un adecuado manejo

Fragility fractures represent a significant public health burden due their high prevalence and associated direct and indirect costs. After 50 years of age, the risk of fracture for females is 50% and 30% for males. The risk of hip fracture in women equates to the risk of invasive breast cancer, and in men the risk of vertebral and hip fracture matches the risk of prostate cancer. Therefore, osteoporosis and its consequence – fragility fractures – should be considered a skeletal disorder that will escalate over the next decades, as a result of an aging population.¹

The study by Sankó Posada et al., published in this edition, highlights several findings confirming the epidemiological data of this pathology in other populations: a higher female prevalence, distal forearm fractures in the younger population, and elderly patients in the case of proximal femur fractures. These two types of fractures were the most frequent, and the third in line were the proximal humeral fractures; this is important since this category is seldom acknowledged among the group of fragility fractures and it less likely that osteoporosis will be diagnosed and treated in patients that present with this type of fracture.² It is surprising to find vertebral fractures in the fourth place and in low numbers, since in most cases these are silent and lead to well-known complications. The risk factors include having experienced previous fractures in 10% of the cases, and diabetes mellitus in 7.9% of the cases. The low percentage of previous fractures may be accounted for by the fact that this is a retrospective study with potential under-registration; however, it should be emphasized that this is certainly the most significant risk factor. The high and increasing prevalence of diabetes in Colombia should be acknowledged, in addition to stressing that over the last few

years, diabetes mellitus type 2 has been recognized as a risk factor for the development of fractures, regardless of the bone mineral density value.³

In terms of management, medical therapy is mentioned in 30% of the patients, but no specific details are provided; there was no in-depth analysis of the diagnostic assessment or patients' referral – this was not the objective of the study – but it is important to acknowledge that even in the presence of fragility fractures, the percentage of patients who are diagnosed and properly treated is quite low.⁴ Notwithstanding the availability of effective and low-cost medications, only a small proportion of postmenopausal women, with high risk of fracture, are assessed and treated. The fear of rare side effects, such as atypical femur fracture and maxillary - mandibular osteonecrosis, as a result of warnings from the regulatory agencies and the media, have significantly contributed to this situation.⁵

The "Capture the Fracture" initiative, developed by the International Osteoporosis Foundation (IOF) and the Fracture Liaison Services (FLS) are an excellent initiative and an opportunity for delivering proper management to patients with fragility fractures who visit the emergency departments, allowing not just for medical or surgical management of the fracture, but also for adequate subsequent multidisciplinary follow-up and management. The implementation of this initiative has shown in four Latin American countries, including Colombia, a reduction in the occurrence of subsequent fragility fractures and a reduction in other outcomes such as length of hospital stay and costs.⁶ Currently in Colombia there are 16 FLS centers organized under the IOF Capture the Fracture criteria,⁷ with the following rating: four cen-

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ters are Silver, five centers are Bronze, and seven centers are starting the blue star ranking process. The higher the ranking, the more compliant with the 13 IOF criteria, such as percentage of identification of fragility fractures, vertebral fracture study, implementation of management guidelines, study of the causes of secondary osteoporosis, falls prevention assessment, start on osteoporosis medication, compliance monitoring, inter alia.

Osteoporosis and its consequence, fragility fractures, constitute a condition with serious implications for the health of the individuals; the predicted increase for the next decades due to the population aging and the lack of an adequate and timely treatment for many patients with this pathology at present is worrying. We must implement and take advantage of the new strategies such as fracture liaison services and orthogeriatric services, in addition to reinforcing in the consultation the adherence of our patients to pharmacological and non-pharmacological therapies for this pathology. Finally, it is important to adopt the new management guidelines with emphasis on risk classification (low, high and very high risk of fracture), in which a very agile and practical management algorithm has been implemented according to the profile of each patient.⁸

REFERENCES

1. Nguyen TV. Individualized fracture risk assessment: State-of-the-art and room for improvement. *Osteoporos Sarcopenia*. 2018;4:2-10, <http://dx.doi.org/10.1016/j.afos.2018.03.001>.
2. Kim TI, Choi JH, Kim SH, Oh JH. The adequacy of diagnosis and treatment for osteoporosis in patients with Proximal humeral fractures. *Clin Orthop Surg*. 2016;8:274-9, <http://dx.doi.org/10.4055/cios.2016.8.3.274>.
3. Sealand R, Razavi C, Adler R. Diabetes mellitus and osteoporosis. *Curr Diab Rep*. 2013;13:411-8, <http://dx.doi.org/10.1007/s11892-013-0376-x>.
4. Andrade S, Majumdar S, Chan A, Buist DS, Go AS, Goodman M, et al. Low frequency of treatment of osteoporosis among postmenopausal women following a fracture. *Ann Intern Med*. 2003;163:2052-7, <http://dx.doi.org/10.1001/archinte.163.17.2052>.
5. Kim SC, Kim DH, Mogun H, Eddings W, Polinski JM, Franklin JM, et al. Impact of the U.S. Food and Drug Administration's safety-related announcements on the use of bisphosphonates after hip fracture. *J Bone Miner Res*. 2016;31:1536-40, <http://dx.doi.org/10.1002/jbmr.2832>.
6. Aziziyeh R, Garcia Perlaza J, Saleem N, Guiang H, Szafranski K, McTavish RK. Benefits of fracture liaison services (FLS) in four Latin American countries: Brazil, Mexico, Colombia, and Argentina. *J Med Econom*. 2021;24:96-102, <http://dx.doi.org/10.1080/13696998.2020.1864920>.
7. Map of Best Practice. The map of best practice currently displays 577 FLS from 48 countries. Available in: https://www.capturethefracture.org/map-of-best-practice?field_rating_tid=All&country=co.
8. Kanis J, Harvey N, McCloskey E, Bruyère O, Veronesi N, Lorentzon M, et al. Algorithm for the management of patients at low, high and very high risk of osteoporotic fractures. *Osteoporosis Int*. 2020;31:1-12.

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