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Technical comment on: Ferrari S, et al. 2020 recommendations for osteoporosis treatment according to fracture risk from the Swiss Association against Osteoporosis (SVGO)

Therapy of osteoporosis in the eldest geriatric patients – a plea for individualized decision-making

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The importance of an initial fragility fracture as a risk factor for further fractures is time-dependent [1]. This recent insight has been implemented in clinical practice with the "imminent fracture risk" category. In 2020, Ferrari et al. published a guideline on behalf of the Swiss Association against Osteoporosis (SVGO) on the diagnosis and treatment of osteoporosis, which has been updated accordingly [2].

This guideline [2] suggests that every patient over 65 years, after suffering an index fragility fracture, should immediately be provided with a specific osteoporosis treatment program. This way, the effect of the osteoporosis therapy may be optimized by as large a number as possible to prevent subsequent fractures [3]. This recommendation, though, is based on the premise that patients are likely to experience the end of a scheduled treatment interval.

However, fragility fracture patients aged 80+ are known for an over-proportionate mortality rate due to age and fracture. This is when the latency until the onset of therapy can have a significant effect. In combination, these facts might cause elderly fracture patients to not experience the desired effect of a newly started osteoporosis therapy, i.e., patients could die before any fracture-reduction effect can take place. Does this scenario only apply in theory, or is it of clinical importance?

To answer this question based on data from a real-world setting, we made use of data from an ongoing quality assurance measure on the "Fracture Liaison Service" performance at our site. From January 2021 to June 2022, data were collected from patients aged 65+ (n = 1381, F:M = 73%:27%, mean age 83 years) who were hospitalized with an acute fracture. Patients with fractures due to high-energy trauma, isolated skull, toes, or finger fractures, as well as fractures resulting from metastatic bone disease were excluded. The one-year follow-up determined the actual occurrence of another or secondary fragility fracture, as well as the possible date of death of a patient. An interim analysis of 373 patients from the 1-year follow-up examinations is available, and we feel compelled to present the following results for discussion. Of all the patients, 29% died within a year, 10% suffered from another fracture, and in 1.5% of the patients, both events occurred.

Based on the preliminary results, we challenge the updated SVGO guidelines with respect to the indications for osteoporosis therapy in the entire elderly imminent risk population. These may not benefit from treatments that have a lengthy time to benefit. Shared decision-making and individualized therapy may allow physicians an opportunity to choose a treatment path more wisely and enlarge the scope of geriatric fracture care management beyond fracture reduction alone.

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Potential competing interests

The author has completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflict of interest was disclosed.

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