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SAVED

'Don't forget osteoporosis': Experts outline guidance for managing fracture risk during COVID-19

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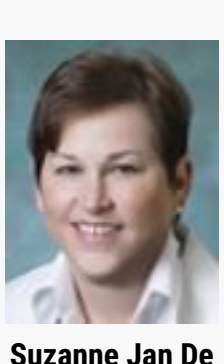
By Regina Schaffer

Perspective from Pauline M. Camacho, MD, FACE

Source/Disclosures +

Christain Girgis

Leading bone health organizations have issued guidance for health care professionals treating people with osteoporosis during the COVID-19 pandemic, outlining important treatment adjustments for osteoporosis therapies and alternative methods for assessing fracture risk in the absence of a DXA scan.



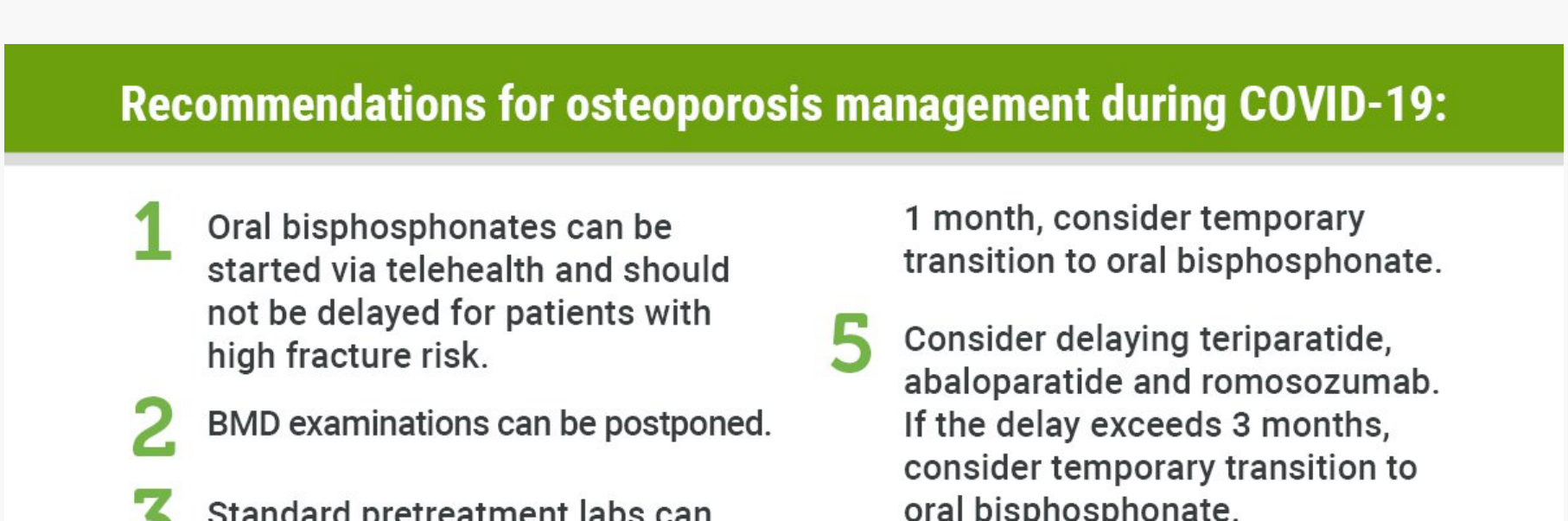
Suzanne Jan De Beur

"We are facing a very urgent health care pandemic, and it is easy to forget underlying conditions that are silent and do not usually manifest until there is a major medical issue, like a fracture, which is the equivalent of a skeletal heart attack," **Suzanne M. Jan De Beur, MD,** associate professor of medicine at the Johns Hopkins University School of Medicine and incoming president of the American Society for Bone and Mineral Research (ASBMR), told Healio. "It is important people with osteoporosis stay on top of their medical care and stay in the medical routine. Clinicians must ensure patients take their medications and that they have access to the medications. If clinicians must modify osteoporosis therapy because a patient cannot come in for injections, follow the guidance or put them on a bridge therapy to keep them from losing bone."

Medication recommendations

The guidelines, developed by ASBMR and endorsed by the Endocrine Society, the American Association of Clinical Endocrinologists, and the European Calcified Tissue Society, address the challenges that social distancing has presented for treating individuals with osteoporosis, including those who receive treatment through injection or intravenous delivery of drugs. It also provides guidance on how some patients may be transitioned to alternative therapies until they are able to resume their original treatment.

"There are several medications that are very time sensitive — one is the human monoclonal antibody denosumab [Prolia, Amgen], which needs to be administered every 6 months," Jan De Beur said. "Denosumab inhibits osteoclast maturation and activity. Once the antibody wears off, a patient can experience a rebound in bone loss, potentially leading to multiple vertebral fractures. We need to manage the need for ongoing medication."


Recommendations for osteoporosis management during COVID-19:
1 Oral bisphosphonates can be started via telehealth and should not be delayed for patients with high fracture risk.
2 BMD examinations can be postponed.
3 Standard pretreatment labs can be avoided if labs within the preceding year were normal.
4 Consider delaying denosumab treatment. If the delay exceeds 1 month, consider temporary transition to oral bisphosphonate.
5 Consider delaying teriparatide, abaloparatide and romosozumab. If the delay exceeds 3 months, consider temporary transition to oral bisphosphonate.
6 Delaying IV bisphosphonate therapy, even for several months, is unlikely to be harmful.
Healio

Leading bone health organizations have issued guidance for health care professionals treating people with osteoporosis during the COVID-19 pandemic, outlining important treatment adjustments for osteoporosis therapies and alternative methods for assessing fracture risk in the absence of a DXA scan.

The guideline recommends that, when possible, patients continue their prescribed osteoporosis regimens; however, some individuals prescribed non-oral osteoporosis medications may not be willing or able to receive their next dose. For patients prescribed denosumab, experts recommend considering a brief delay in treatment. If the delay exceeds 1 month, or 7 months from the most recent prior injection, the clinician should consider a temporary transition to oral bisphosphonate therapy.

"If the person cannot get their dose, what can happen is they can go on a bisphosphonate during this offset period," **Christian M. Girgis, MD, PhD, staff specialist in endocrinology and clinical lead osteoporosis service at Westmead Hospital, Sydney,** told Healio. "It is not ideal, but it is better to be on something than nothing."

For individuals prescribed teriparatide (Forteo, Eli Lilly), abaloparatide (Tymlos, Radius Health) or romosozumab (Evenity, Amgen), experts similarly recommend considering a delay in treatment. If the delay exceeds 3 months, consider temporary transition to oral bisphosphonate therapy. For patients prescribed IV bisphosphonate therapy, delays of even several months are unlikely to be harmful, according to the guideline.

For individuals at high risk for fracture, such as those who recently sustained an osteoporotic fragility fracture, initiation of oral bisphosphonate therapy should not be delayed and can be done via telehealth, according to the guideline.

"Osteoporosis is a major health problem and a source of major morbidity and mortality," Jan De Beur said. "Treatment should be ongoing. We can manage around these issues that we face now."

Assessing fracture risk

With social distancing mandates in place across the nation, many patients are avoiding treatment, and testing and diagnoses are delayed, according to Girgis. In an article published in April in *Osteoporosis International,* Girgis wrote that with suspended DXA services and advice that vulnerable people limit their exposure to clinical spaces, bone density assessment of patients with suspected osteoporosis will "no longer be feasible" in the near term.

"We have a lot of patients who do not want to come in for blood tests or DXA scans, and that is completely understandable," Girgis told Healio. "We may need to forgo the provision of a DXA scan. We could consider the use of a fracture risk calculator, such as FRAX. This tool can be found online and has been adjusted for different parts of the world. Wherever you are in the world, you can input a few demographic factors, risk factors, and family history, and then calculate a person's risk. You don't need bone density to get a fracture risk calculation."

Girgis said fracture liaison services will need to consider fracture risk thresholds for their particular patient group to guide treatment initiation.

Jan De Beur said that clinicians can safely delay DXA for some patients who are currently on osteoporosis therapy.

"If you have someone newly started on therapy and you want to assess the response to therapy, at 1 year is typically when we get a DXA; however, pushing it back for a few months is not going to impact care to a large degree," Jan De Beur said.

The guidance also notes that standard, pretreatment labs, such as calcium, 25-hydroxyvitamin D, or creatinine measurements prior to IV bisphosphonate and/or denosumab administration, can be avoided if labs within the preceding year were normal and the patient's health has been stable.

"However, laboratory evaluation is recommended for patients with fluctuating renal function and those who are at higher risk of developing hypocalcemia, such as those with malabsorptive disorders, hypoparathyroidism, advanced renal dysfunction (chronic kidney disease stage 4 or 5), or taking loop diuretics," the guidance states.

Building bone strength at home

Clinicians should check in with patients at risk for fracture to ensure they are engaging in regular weight-bearing exercise while at home to improve strength and balance and reduce fall risk, Girgis said.

"With the advice to avoid large gatherings, such as community centers or local gyms, home-based exercise programs should be considered," Girgis wrote. "Such programs have been shown to improve the quality of life of older individuals, may improve muscle mass and are feasible."

Jan De Beur said simple resistance exercises are recommended for most high-risk individuals.

"The bone is sensitive to mechanical stimulation," Jan De Beur said. "Light weights, resistance bands and walking outside, if people can safely maintain social distancing, are all good options."

'Adapt to the challenges'

In the age of COVID-19, treatment of chronic diseases such as osteoporosis should not become an unintended casualty, Girgis wrote, adding that clinicians need to "adapt to the challenges" posed by the crisis.

"Don't forget osteoporosis," Girgis said. "We lose so much ground gained when we start to put aside all the hard work we have done because we are dealing with a crisis. Remember those who are vulnerable. Osteoporosis is a fundamental condition which we can, in fact, cure. We know hip fractures increase mortality risk, and we must do all we can — even in the midst of a crisis — to remember that." – *by Regina Schaffer*

Reference:

Girgis CM; Clifton-Bligh RJ. *Osteoporos Int.* 2020; doi:10.1—7/s00198-020-05413-0.

Joint guidance on osteoporosis management in the era of COVID-19. Available at: https://www.endocrine.org/-/media/endocrine/files/membership/joint-statement-on-covid19-and-osteoporosis-final.pdf. Accessed: May 11, 2020.

For more information:

Christian M. Girgis, MBBS, FRACP, can be reached at christian.girgis@sydney.edu.au. **Suzanne M. Jan De Beur, MD,** can be reached at sjandebe@jhmi.edu.

Disclosures: Girgis and Jan De Beur report no relevant financial disclosures.

PERSPECTIVE

BACK TO TOP

Pauline M. Camacho, MD, FACE

The evidence of risk for multiple vertebral fractures if a patient misses a denosumab dose is very scary. A drug that we give, when withheld, could actually cause a worse outcome vs. baseline. You can safely delay a dose for up to 4 weeks, but not much beyond that.

With the easing of some COVID-19-related restrictions, things are improving. Some of us were trying to set up ways to administer denosumab — which is administered every 6 months — to these patients, who are primarily older and at higher risk for fracture. Some days, there is no one in the clinic, so as long as precautions are being taken, it is safe to come in for dose administration. We do have some patients who do not want to come into the building during this time. For those cases, we make plans to accommodate them, such as findings a private place to administer the dose safely. However, if one has to set that up for a large number of patients, it can become a problem. Some providers are conducting drive-through clinics.

I do like the backup option of using oral bisphosphonates. Certainly, there is evidence about transitioning off denosumab that suggests alendronate is acceptable to use in the short term. Such a mediation switch would be an issue for a person with renal insufficiency, which would be the main reason they were prescribed denosumab.

DXA scans can be safely delayed for most patients. If you have a high-risk patient, you don't need to wait on the bone density measurement. As far as lab work, clearly, these labs may not be as urgent as other labs and can also be delayed.

Pauline M. Camacho, MD, FACE
Professor of Medicine, Division of Endocrinology and Metabolism
Loyola University Medical Center
Director, Loyola University Osteoporosis and Metabolic Bone Disease Center

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