Letter to the Editor: "Our Response to COVID-19 as Endocrinologists and Diabetologists"

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We read with great interest the timely and informative editorial by Kaiser et al on managing certain endocrine conditions during COVID-19 pandemic (1). However, couple of equally important areas of concern were not mentioned.

First, the management of hypoparathyroidism, particularly in light of recalled recombinant human parathyroid hormone, deserves some attention. Patients with symptomatic COVID-19 infection manifest several electrolyte abnormalities including serum calcium. Hypoparathyroid patients can be at risk of sudden drop in serum calcium level after missing only a few doses of calcitriol and calcium, and may develop tetany, laryngeal spasm, and seizures. The only recourse in during COVID-19 pandemic is to administer intravenous calcium in an emergency room, which should be avoided during a pandemic for obvious reasons. In addition, clinicians should be aware of ECG abnormalities if the patients are being treated with chloroquine, hydroxychloroquine or azithromycin, all which are known to cause prolonged QTc interval (2), as does acute and severe hypocalcemia (3). Thus, there is a need for close monitoring of serum calcium levels in symptomatic COVID patients, and adherence with calcitriol and calcium supplements as prescribed and follow sick-day guidelines (4).

Second area of concern is the potential for interruption of parenteral treatments in patients with osteoporosis during this pandemic, many of whom are in the high-risk group for COVID-19 infection because of advanced age and/or comorbidities. The spread of COVID-19 infection leading to limited or no access to clinics or infusion centers may result in missing scheduled time-sensitive parenteral medications. While administration of intravenous zoledronic acid can be delayed for a few months to a year, such time-lapse latitude does not apply to subcutaneous denosumab because of the potential for the so-called “rebound fractures” (5), although there is no consensus on this complication (6). Nevertheless, it is important not to delay the scheduled denosumab dose by more than 4-6 weeks. Clinics could accommodate the visits for administration of injectable medications by taking necessary

precautions to ensure the health and safety of the patients or temporarily switch treatment to an oral bisphosphonate. Another option is to self-administer denosumab if the patient is reluctant to go to the clinic. Amgen, the manufacturer of denosumab, may have resources available to help patients with self-administration. Also, since there is an increased risk of thromboembolic events related to COVID-19 infection (7), it is best to discontinue raloxifene, which is also associated with such risk (8).

Finally, timing the transition of treatment from anabolic (teriparatide, abaloparatide, romosozumab) to injectable antiresorptive therapy (zoledronic acid, denosumab) during a pandemic is also important. Admittedly, there are no guidelines or consensus on how best to achieve these transitions, we recommend continuing anabolic therapies for additional 1-2 months. If the transition must be made, the interval between treatments should not exceed 2-4 weeks because of concerns related to rapid and substantial decline in bone density. In patients on monthly romosozumab, the scheduled dose can be delayed for 1-2 months. These potential approaches may vary among local practices depending on available resources and infrastructure.

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