

Henry Ford Health System

Henry Ford Health System Scholarly Commons

Endocrinology Articles

Endocrinology and Metabolism

7-1-2020

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

Ruban Dhaliwal

Sanjay K Bhadada

Sudhaker D. Rao

Follow this and additional works at: https://scholarlycommons.henryford.com/endocrinology_articles

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

Ruban Dhaliwal,¹ Sanjay K. Bhadada,² and Sudhaker D. Rao³

¹Metabolic Bone Disease Center, State University of New York Upstate Medical University, Syracuse, New York, US; ²Department of Endocrinology, Post Graduate Institute of Medical Education and Research, Chandigarh, India; and ³Division of Endocrinology, Diabetes and Bone & Mineral Disorders, and Bone & Mineral Research Laboratory, Henry Ford Hospital, Detroit, Michigan, US

ORCID numbers: 0000-0003-4179-4006 (R. Dhaliwal); 0000-0002-1260-5512 (S. D. Rao).

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, a 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 a 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 during the 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 electrocardiogram abnormalities if patients are being treated with chloroquine, hydroxychloroquine, or azithromycin, all of which are known to cause prolonged corrected QT 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 sick-day guidelines (4).

A second area of concern during this pandemic is the potential for interruption of parenteral treatments in patients with osteoporosis, 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. Although the 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 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 to 6 weeks. Clinics could accommodate the visits for administration of injectable medications by taking necessary precautions to ensure the health and safety of patients or temporarily switch treatment to an oral bisphosphonate. Another option is to self-administer denosumab if the patient is reluctant to come to the clinic. Amgen, the manufacturer of denosumab, may have resources available to help patients with self-administration. Also, because 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, but we recommend continuing anabolic therapies for an additional 1 to 2 months. If the transition must be made, the

ISSN Print 0021-972X ISSN Online 1945-7197
Printed in USA

© Endocrine Society 2020. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com

Received 14 April 2020. Accepted 5 May 2020.

First Published Online 8 May 2020.

Corrected and Typeset 22 May 2020.

interval between treatments should not exceed 2 to 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 to 2 months. These potential approaches may vary among local practices depending on available resources and infrastructure.

Additional Information

Correspondence and Reprint Requests: Ruban Dhaliwal, MD, MPH, Metabolic Bone Disease Center, SUNY Upstate Medical University, 750 East Adams Street, Syracuse, NY 13210. E-mail: dhaliwar@upstate.edu.

Disclosure Summary: The authors have nothing to disclose.

References

1. Kaiser UB, Mirmira RG, Stewart PM. Our response to COVID-19 as endocrinologists and diabetologists. *J Clin Endocrinol Metab.* 2020;105(5):dgaa148.
2. Chang D, Saleh M, Gabriels J, et al. Inpatient use of ambulatory telemetry monitors for COVID-19 patients treated with hydroxychloroquine and/or azithromycin. [Published online ahead of print April 18, 2020]. *J Am Coll Cardiol.* 2020;S0735-1097(20)35009-9. Doi:10.1016/j.jacc.2020.04.032
3. Rometo AB, Beerman L, Arora G. Electrolyte screening in the evaluation of prolonged QTc interval. *Cardiol Young.* 2015;25(2):398-399.
4. Bhadada SK, Bhansali A, Sridhar S, Singh R, Rao S. Do we need sick-day guidelines for hypoparathyroidism? *Indian J Endocrinol Metab.* 2012;16(3):489-491.
5. Lamy O, Gonzalez-Rodriguez E, Stoll D, Hans D, Aubry-Rozier B. Severe rebound-associated vertebral fractures after denosumab discontinuation: 9 clinical cases report. *J Clin Endocrinol Metab.* 2017;102(2):354-358.
6. Rao SD, Qiu S, Dhaliwal R, Bhadada SK. Letter to the editor: severe rebound-associated vertebral fractures after denosumab discontinuation. *J Clin Endocrinol Metab.* 2017;102(6):2111.
7. Long B, Brady WJ, Koyfman A, Gottlieb M. Cardiovascular complications in COVID-19. [Published online ahead of print April 18, 2020]. *Am J Emerg Med.* 2020;S0735-6757(20)30277-1. Doi:10.1016/j.ajem.2020.04.048
8. Khorsand I, Kashef R, Ghazanfarpour M, Mansouri E, Dashti S, Khadivzadeh T. The beneficial and adverse effects of raloxifene in menopausal women: a mini review. *J Menopausal Med.* 2018;24(3):183-187.