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LETTER

Reply to letter to the editor: "COVID-19 and the endocrine system: exploring the unexplored". Focus on acromegaly

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Dear Editor-In-Chief,

Mercuri and colleagues have highlighted the commonly talked about aspects of acromegaly [1], while lot more remains to be discussed with respect to COVID-19.

Although patients with acromegaly might not be at an increased risk of infection, the plethora of prevalent comorbidities, notably, diabetes mellitus, hypertension and cardiovascular disease, predisposes them to a higher risk of poor prognosis with COVID-19 [2]. The possibility of an increased risk of infection however cannot be completely negated as acromegaly patients with secondary adrenal insufficiency on glucocorticoid replacement may still be at an higher risk [3, 4]. Besides, they tend to have obstructive sleep apnoea and small airway obstruction that may further complicate the clinical course if infected with SARS-CoV-2.

Surgical removal of somatotropinoma via transphenoidal route remains the cornerstone for therapy. However, transsphenoidal surgery (TSS) results in aerosol generation which conveys a very high risk of viral transmission and hence should be avoided amid the pandemic. However, it remains a viable option in patients with progressive compressive symptoms, provided the patient tests negative for SARS-CoV-2 and optimum hospital infrastructure is available for safe care. Patients without compressive symptoms can be managed with medical therapy in the interim period with long-acting somatostatin-receptor ligands (SRLs), pegvisomant and/or dopamine agonists [3].

Amid the ongoing pandemic, long-acting SRLs are best administered at a high-dose to minimize injection frequency and thereby contact with health care professionals. Caregivers can be trained regarding administration of intramuscular injections at home via virtual interactions with physicians and/or online videos. Blood glucose should be periodically monitored in patients on SRLs as both improvement and worsening of glycemic control has been reported. In addition, the increased risk of QT prolongation needs to be kept in mind in an acromegaly patient on SRL who gets infected with COVID-19 and is inadvertently prescribed hydroxychloroquine [2]. Long-acting pasireotide offers good biochemical control but is also associated with dysglycemia.

Pegvisomant is a good choice in acromegaly patients with dysglycemia, however, the drug is not universally available and being exorbitantly priced, might not be accessible to patients in resource limited settings. Moreover, the drug should be used cautiously in patients with macrosomatotropinoma and compressive symptoms as an increase in adenoma size has been reported in 3% of patients started on pegvisomant. The combination of pegvisomant and SRL offers good control of disease activity, however, is associated with an increased risk of transaminitis necessitating monitoring of liver function that might not be feasible during the pandemic.

The dopamine agonist, cabergoline offers a safe and relatively inexpensive alternative to SRL and pegvisomant, however, normalization of insulin-like growth factor 1 (IGF1) is achieved in only 30% of patients and might be considered only in patients with mild elevation of IGF1. However, combining cabergoline with SRL is a reasonable option as combination therapy leads to normalization of IGF1 in nearly 50% of patients [5].

Dose titration under the prevailing circumstances can be reliably achieved via virtual clinics, relying mostly on the clinical status, IGF1 measurement (if it can be safely arranged) and patient-reported adverse events.

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Compliance with ethical standards

Conflicts of interest None to declare.

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