

Paraganglioma-induced Catecholamine-mediated Gangrene

Tim Brandenburg,¹ Nicole Unger,¹ Dagmar Fuhrer,¹ and Susanne Tan¹

¹Department of Endocrinology, Diabetes and Metabolism, University Hospital Essen, University Duisburg-Essen, 45147 Essen, Germany

Correspondence: Susanne Tan, MD, Department of Endocrinology, Diabetes and Metabolism, University Hospital Essen, University Duisburg-Essen, Hufelandstrasse 55, 45147 Essen, Germany. Email: susanne.tan@uk-essen.de.

Abbreviations: ED, emergency department; ULN, upper limit of normal.

Image Legend

A 52-year-old man presented to the emergency department (ED) with painful gangrene on multiple toes of both feet. Duplex ultrasound as well as optical artery printing excluded peripheral arterial occlusive disease. The patient's medical history included a malignant paraganglioma not associated with a germline pathogenic variant in the succinate dehydrogenase genes. The primary paravertebral paraganglioma had been surgically removed 6 years previously. Bone metastases were detected 1 year postoperatively. The patient had received 11 cycles of Lu-177-DOTATOC peptide receptor radionuclide therapy. During treatment with the multikinase inhibitor sunitinib, the last staging 4 months before ED admission had shown stable disease. Biochemical reevaluation at admission showed catecholamine excess with plasma normetanephrine 140-fold above the upper limit of normal

(ULN) (22 111 pg/mL [120 726 pmol/L]; ULN: 161.4 pg/mL [881 pmol/L]) and 3-methoxytyramine 130-fold above the ULN (2133 pg/mL [12 772 pmol/L]; ULN: 16.4 pg/mL [98.2 pmol/L]). Computed tomography imaging scanning disclosed new multiple hepatic metastases. The patient received immediate alpha-adrenergic blockade but succumbed to the progressive disease, which was clinically unmasked by a bilateral gangrene of the toes (arrows).

Acknowledgment

Signed informed consent could not be obtained from the patient or a proxy but has been approved by the treating institution.

Disclosures

None declared.

