Erythema as a Visual Surrogate Marker of Glucagonoma

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A 61-year-old female presented with progressive erythema on her foot (Picture A). She had previously undergone surgical resection of a pancreatic neuroendocrine tumor with a Ki-67 index of 15%, octreotide treatment, chemotherapy, and transarterial embolization over the previous eight years. Metastases to the liver were identified on magnetic resonance imaging (Picture B). We initially administered sunitinib (37.5 mg per day) in an effort to inhibit the vascular endothelial growth factor- and platelet-derived growth factor-mediated receptor signaling (1). Four months later, the metastases were no longer detectable on imaging (Picture C). It is notable that the erythema on the foot (Picture A) resolved concurrently with stabilization of the metastatic disease (Picture C). We therefore believe that the erythema is a visual surrogate marker of glucagonoma. Sunitinib may have played a role in the resolution of the erythema, but the simultaneous improvement in the clinical status of the disease increases the likelihood of glucagonoma as the causative factor of the erythema (2). This is the first reported case of glucagonoma presenting clinically with necrolytic migratory erythema.

References:

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erythema was resolved (Picture C). Magnetic resonance imaging revealed that the liver metastases responded to this treatment (Picture D). The serum glucagon level (initially 803 pg/mL; reference level 71-174 pg/mL) fell to 425 pg/mL. We thought that the successful treatment of glucagonoma by sunitinib improved the necrolytic migratory erythema. Because necrolytic migratory erythema is an important paraneoplastic syndrome associated with glucagonoma (2), physicians should be aware of this symptom.

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References