Digital necrosis induced by erlotinib treatment in metastatic adenocarcinoma of the lung

KEY WORDS

Digital necrosis, erlotinib, lung cancer, systemic sclerosis

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Re: Husein–ElAhmed H, Callejas–Rubio JL, Del Olmo RO, Ríos–Fernandez R, Ortego–Centeno N. Severe Raynaud syndrome induced by adjuvant interferon alfa in metastatic melanoma. *Curr Oncol* 2010;17:122–3.

We read with interest the article by Husein–ElAhmed *et al.,* who reported the onset of severe Raynaud syndrome induced by adjuvant interferon alfa in a woman who underwent surgery for cutaneous ulcerated nodular melanoma, with evolution to pelvic lymph node metastasis. This patient had a previously undiagnosed scleroderma.

Here, we report a similar experience in a woman with adenocarcinoma of the lung. She developed upper-limb digital necrosis after the start of second-line treatment with erlotinib, an oral anticancer drug that inhibits the epidermal growth factor receptor.

Our patient, a 72-year-old non-smoking woman with hypertension, has metastatic lung cancer progressing even after 3 cycles of chemotherapy with carboplatin and gemcitabine. At 20 days after the start of oral erlotinib 150 mg daily, she presented to our clinic for the onset of digital necrosis at the second finger of the right hand (Figure 1).

Erlotinib was promptly discontinued, and treatment with calcium channel blockers, nitrates, and antiplatelet drugs was initiated. After 3 weeks of therapy, the digital lesion was completely healed. As in the case of the patient described by Husein–ElAhmed *et al.,* our patient had an unrecognized scleroderma. Her medical history included Raynaud phenomenon, physical examination showed acrosclerosis and teleangiectasia,

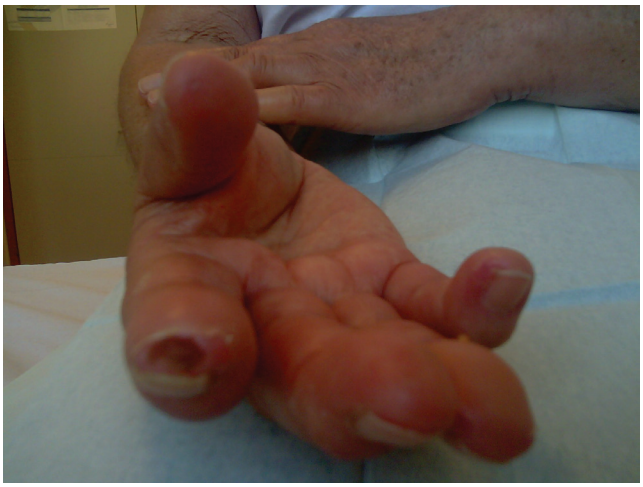

FIGURE 1 *Appearance of digital necrosis after start of erlotinib therapy.*

and anti–Scl-70 antibodies were positive. Our patient scored 7 according to the Naranjo adverse drug reaction algorithm [1] (0 = doubtful; 1–4 = possible; 5–8 = probable; 9 = highly probable), and the hypothesis of a cause–effect relationship is therefore plausible.

To the best of our knowledge, this report is the first of onset of digital ulcers after erlotinib therapy. We therefore believe that, to avoid onset of vascular ischemic disease with digital necrosis, the possible presence of Raynaud phenomenon, associated with scleroderma or not, should be carefully investigated before anticancer therapy is started. In any case, this kind of complication should be always considered, with prompt intervention at first clinical signs. This recommendation is valid not only for biologic drugs, but for chemotherapy drugs as well [2].

Recently, tyrosine kinase inhibitors has been proposed for the treatment of systemic sclerosis and fibrotic diseases [3] because of their potential anti-fibrotic effects. We believe that in patients with systemic sclerosis or Raynaud phenomenon (or both), the use of such drugs should receive extremely careful prior evaluation.

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CONFLICT OF INTEREST DISCLOSURES

The authors have no conflicts of interest that are directly relevant to the content of this case report.

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