Palmar Bullous Blistering Induced by Erlotinib

Arne Berg, MD, PhD, Odd Terje Brustugun, MD, PhD,*† Marius Lund-Iversen, MD,‡ and Åslaug Helland, MD, PhD*†*

A 56-year-old female was allocated to definite radiotherapy of 66 Gy (5 weekly fractions of 2 Gy) because of stage III non-small cell lung cancer (T1bN3M0, middle-differentiated adenocarcinoma). Epidermal growth factor receptor (EGFR) mutation test was negative. Standard concomitant platinum-based chemotherapy was avoided because of a chronic kidney disease. As an alternative, concomitant erlotinib 150 mg once a day was prescribed based on the possible radiosensitizing effect by targeting the EGFR, even in the absence of EGFR mutation.[1] After a few days, she developed mild acneiform facial rash and mild diarrhea. Twenty-three days after the start of the treatment, she noticed a small blister in one of her palms. A severe skin reaction developed rapidly within the next 2 days and included painful hemorrhagic palmar bullae (Figure 1), maculopapular erythema with desquamating elements on the trunk and extremities, and generalized pruritus. Erlotinib was stopped after 25 days of treatment. Aspiration of bullous fluid and biopsies from the palm on day 27 was evaluated to be consistent with a bullous drug reaction (Figure 2). The skin reaction improved gradually during symptomatic treatment with topic hydrocortisone, an antihistamine, antibiotics, and 1 week of prednisolone 20 mg once a day.

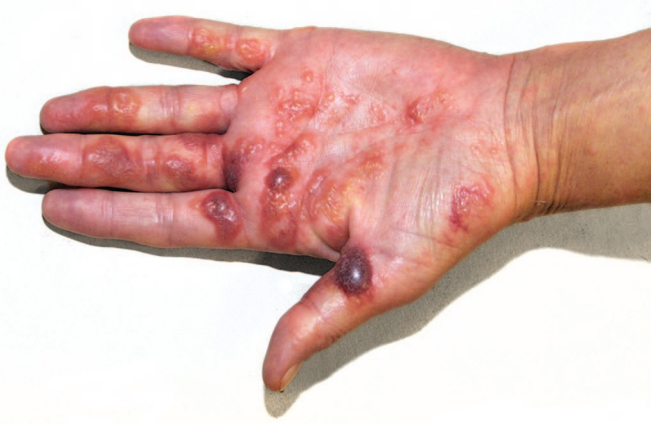

FIGURE 1. Acute onset of palmar bullous dermatitis 23 days after the start of erlotinib. Picture taken on day 25, 2 days after the first appearance. Photo courtesy: Per Marius Didriksen, Oslo University Hospital.

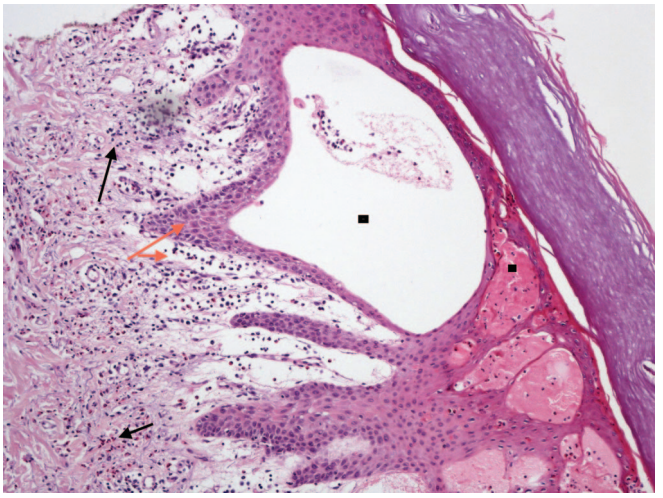

FIGURE 2. Histological biopsy showing intraepidermal bullae of varying size (squares), spongiosis (long red arrow), subepithelial edema (short red arrow), and a dermal leukocytic infiltrate composed of lymphocytes and plasma cells (long black arrow), and eosinophils (short black arrow), consistent with a bullous drug reaction. Photo courtesy: Marius Lund-Iversen, Oslo University Hospital.

The US Food and Drug Administration warns against bullous, blistering, and exfoliative skin disorders induced by erlotinib (www.fda.gov). Oteri et al.[2] recently reported a case of localized bullous dermatitis limited to one of the upper extremities. With the increasing use of erlotinib and other EGFR-targeting agents, early recognition of uncommon but potentially severe skin reactions should be emphasized.

*Department of Oncology, Oslo University Hospital-Radiumhospitalet; †Institute for Clinical Medicine, Faculty of Medicine, University of Oslo; and ‡Department of Pathology, Oslo University Hospital, Oslo, Norway.

Disclosures: The authors declare no conflicts of interest.

Address for correspondence: Arne Berg, MD, PhD, Department of Oncology, Oslo University Hospital HF-Radiumhospitalet, Postboks 4953 Nydalen, 0424 Oslo, Norway. E-mail: arne.berg@oslo-universitetssykehus.no

ISSN: 1556-0864/11/0605-0954

REFERENCES

1. Provencio M, Sánchez A, Garrido P, et al. New molecular targeted therapies integrated with radiation therapy in lung cancer. *Clin Lung Cancer* 2010;11:91–97.
2. Oteri A, Cattaneo MT, Filipazzi V, et al. A case of bullous dermatitis induced by erlotinib. *Oncologist* 2009;14:1201–1204.