CLINICAL IMAGES

Hand-foot syndrome related to chemotherapy

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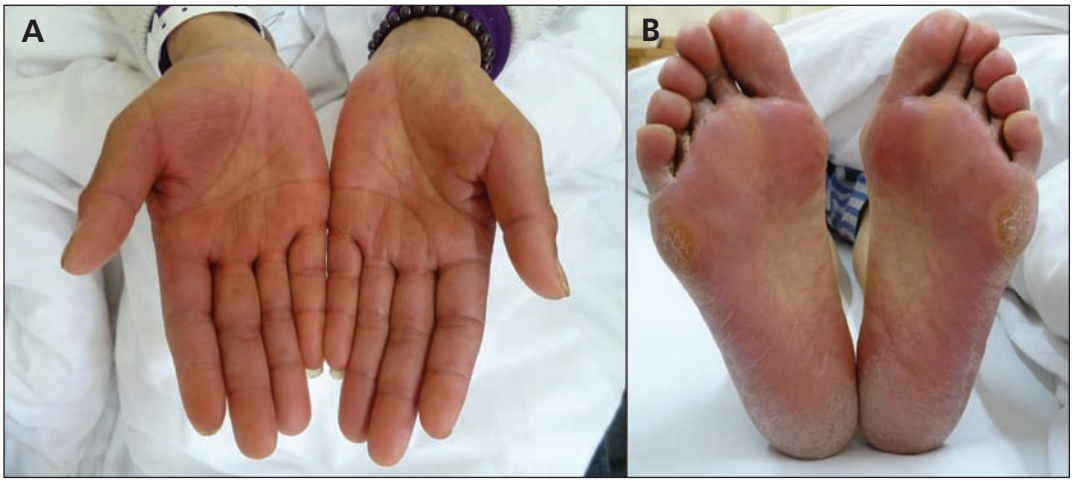

Figure 1: Sharply demarcated erythema of the palms (A) and soles (B) of a 59-year-old woman undergoing chemotherapy for rectal cancer.

A 59-year-old woman with advanced rectal cancer underwent a 2-week course of chemotherapy with capecitabine (on days 1–14) and oxaliplatin (on day 1). On day 9, she developed sharply demarcated erythema, swelling and pain of her palms and soles (Figure 1). The eruption progressed during the course of chemotherapy, and hand-foot syndrome associated with capecitabine was diagnosed. The erythema was treated with topical urea cream, and it completely resolved 10 days after the last dose of capecitabine.

Hand-foot syndrome (also known as hand-foot reaction, palmar-plantar erythrodysesthesia, chemotherapy-associated acral erythema or Burgdorf reaction) is a cutaneous toxicity[1–3] that is most frequently linked to cytotoxic drugs (e.g., 5-fluorouracil, capecitabine, cytarabine, docetaxel and pegylated liposomal doxorubicin)[1] and multikinase-inhibitors (e.g., sorafenib and sunitinib).[2] It usually occurs 2–12 days after administration of chemotherapy.[1] The initial symptoms are palmoplantar dysesthesia and tingling, which can evolve within a few days to burning pain and symmetric well-defined erythema with edematous swelling. In severe cases, blistering, desquamation and subsequent ulceration can occur.[1–3] It usually resolves within a few weeks after withdrawal of the responsible drug.[1,3]

The diagnosis of hand-foot syndrome is made based on its clinical features. The differential diagnosis includes other cutaneous drug reactions, erythromelalgia, graft-versus-host disease, chemotherapy-induced Raynaud syndrome and erythema multiforme.

Patients taking medications associated with hand-foot syndrome should be informed of the potential for development of this condition. Mechanical stress on the skin including pressure, friction and heat should be avoided.[3] Regular use of moisturizing lotion may be helpful. Although various medications (e.g., pyridoxine, dimethylsulfoxide and oral corticosteroids) have been used to treat this syndrome,[1] their use is not supported by randomized controlled trials.

References

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