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Toxic erythema of chemotherapy presenting as hemorrhagic bullae on the dorsal hands

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Toxic erythema of chemotherapy is the most inclusive and commonly accepted name given to a host of related eruptions that occur in the weeks following high-dose chemotherapy. Less inclusive names that describe the tendency for most cases to involve acral sites include “hand-foot syndrome”, “acral erythema”, and “palmoplantar erythrodysesthesia”. This is in contrast to the primarily histologic descriptive name, “eccrine squamous syringometaplasia”. This potentially confusing entity is complicated by variable presentation. We present the case of a 60-year-old female who developed a rash composed of exquisitely tender erythematous papules and plaques as well as variably-sized hemorrhagic bullae concentrated over sites of pressure on the dorsal hands. This occurred in the weeks following initiation of R-CHOP chemotherapy for treatment of diffuse large B-cell lymphoma. Histologic sections demonstrated a slightly irregular and hyperplastic epidermis with spongiosis and necrotic keratinocytes. Dermal findings included marked papillary dermal edema, extravasated red blood cells, and an underlying band-like collection of neutrophils forming microabscesses centered on pilosebaceous and eccrine units, confirming the diagnosis of toxic erythema of chemotherapy. The patient’s rash improved over the next several weeks with pain control and topical clobetasol. This case serves to highlight the variable presentation of toxic erythema of chemotherapy in terms of primary lesion (ranging from patchy erythema to indurated papules, plaques, and bullae) as well as cutaneous sites affected, and that a strong index of suspicion is necessary when patients present with a rash following chemotherapy in order to avoid unnecessary treatments and interventions for this self-resolving condition.

1. Bologna JL, Cooper DL, Glusac EJ. Toxic erythema of chemotherapy: a useful clinical term. *J Am Acad Dermatol*. 2008 Sep; 59(3):524-9.