Letter

Generalized bullous fixed drug eruption related to intravenous contrast

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To the Editor

Fixed drug eruption (FDE) is a type of cutaneous adverse drug reaction that develops at the same body sites minutes to hours after the individual is reexposed to an offending drug. Clinically, FDE can have different morphologic presentations. In this report, we discuss a case of the generalized bullous subtype and the concern it can raise when it mimics other severe cutaneous adverse eruptions.

A man in his late 70s with a medical history of bladder cancer, chronic obstructive respiratory failure, hypertension, and hyperlipidemia was transferred to the University of Louisville hospital with concerns for Stevens-Johnson Syndrome (SJS). His rash began around his eyes then spread to his vermillion lips, trunk, upper extremities, and penis after receiving contrast for a computed tomography scan that was ordered to assess his response to therapy of his bladder cancer. He had experienced a similar but less severe rash in the past, which also developed after he had received contrast. He denied fever, chills, eye pain or redness, nausea, vomiting, diarrhea, or dysuria. He denied any recent changes in his current medications and no over-the-counter or newly prescribed medications were taken.

Physical examination revealed eyelid erythema and swelling. Scattered sharply demarcated erythematous round patches, some with overlying fragile bullae, were noted on the chest, back, upper extremities, and glans penis. The majority of his eruptions are shown (Figures 1-2). The patient was diagnosed with generalized bullous fixed drug eruption (GBFDE) secondary to the IV contrast he had received for the CT scan. Diagnosis was supported by history of similar, less diffuse rash, rapid onset of lesions, and characteristic morphologic presentation. We recommended an oral prednisone taper over two weeks and triamcinolone 0.1% cream twice daily as needed for itching.

As in our case, based on patient history, same-site recurrence of the rash is the most characteristic and



Figure 1. A-B) Multiple well-circumscribed erythematous patches with overlying flaccid and detached bullae on the chest, abdomen, and upper back.

reliable clinical finding of FDE. 1 There are various morphologic manifestations, the most common being one or more sharply demarcated, red, or violaceous round patches that can vary in size and that usually heal with residual hyperpigmentation. 1 Fixed drug eruption can also present with numerous and disseminated lesions and subepidermal blisters that heal without scarring, which has been labeled GBFDE. These features of GBFDE can lead to misdiagnosis or make it difficult to differentiate from other drug-induced eruptions with generalized bullae and erosions, like SJS. It is important to remember that clinically compared to SJS, GBFDE will have a quicker onset after administration of the inciting agent, reoccurs at the same location, and presents with well-circumscribed lesions with sparse mucosal involvement.^{2,3} Differentiating FDE from SJS is also imperative given the severe consequences of SJS, like lengthy hospital admissions, prolonged recovery time, and ocular and genital scarring.

Numerous drugs have been associated with FDE, including antibiotics, nonsteroidal anti-inflammatory drugs, acetaminophen, antiepileptics, and antimalarials,

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Figure 2. Flaccid bullae and erosions with crusting on the upper and lower vermilion lips.

but only two cases of GBFDE secondary to the administration of contrast have been reported.^{2,3} Interestingly, these cases also describe patients that were misdiagnosed as SJS. Our case provides another example of this uncommon variant of FDE secondary to contrast. Regardless of the causative drug, avoiding recurrence remains the most important goal in management.

It is important to keep in mind that though FDE typically presents with well-defined patches, there are numerous subtypes that can mimic other eruptions. History of the rash will be key in guiding the clinician to the correct diagnosis, allowing for appropriate management recommendations.

Potential conflicts of interest

The authors declare no conflicts of interest.

References

- 1. Lee AY. Fixed drug eruptions. Incidence, recognition, and avoidance. *Am J Clin Dermatol*. 2000;1(5):277-285. doi:10.2165/00128071-200001050-00003. PMID:11702319
- 2. Tsang DA, Lim SYD, Justin WSB, Hui LLY. Generalized Bullous Fixed Drug Eruption to Iodinated Contrast Media in Skin of Color. *Am J Med.* 2022;135(11):1326-1329. doi:10.1016/j.amjmed.2022.07.010. PMID:35901912
- 3. Gavin M, Sharp L, Walker K, et al. Contrast-induced generalized bullous fixed drug eruption resembling Stevens-Johnson syndrome. *Proc (Bayl Univ Med Cent)*. 2019;32(4):601-602. doi:10.1080/08998280.2019.1644147. PMID:31656435