

# Images in Infectious Diseases

# Drug-induced hypersensitivity syndrome after initiation of darunavir and raltegravir

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FIGURE 1

A 38-year-old HIV-infected African-Brazilian woman on virologic treatment failure presented with a 5-day history of fever, malaise, and a cutaneous eruption that started on the face. She appeared ill and icteric (Figures A/C), which she attributed to Zika virus infection. Five weeks previously, a novel genotype-guided antiretroviral combination (raltegravir and ritonavir-boosted darunavir) was initiated. Previous episodes of cryptococcosis left visual and auditory deficits. She had experienced multiple antiretroviral agents, and her CD4 count was 521/mm<sup>3</sup>.

The rash was characteristic of drug-induced hypersensitivity syndrome (DIHS): facial edema, mainly periorbital, with follicular accentuation (Figures A/F). Caudal progression

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e-mail: walter.eyer@ig.com.br Received 11 September 2016 Accepted 21 October 2016 (Figure B), scaling (Figure G-H), cheilitis (Figure E), and Terry's nails (Figure I) followed. An ocular secretion gave the face a yellowish-crusted appearance (Figure J). There was leukocytosis without eosinophilia, elevated liver transaminases, and conjugated hyperbilirubinemia. She died of respiratory failure in the intensive care unit 9 days later.

Also known as a drug reaction with eosinophilia and systemic symptoms (DRESS), DIHS is a severe, idiosyncratic, multiorgan disorder that arises weeks after initiation of a drug. Eosinophilia is absent in approximately 40% of cases. Aromatic anticonvulsants are prominent culprits. Diverse antiretroviral and other antimicrobial agents may induce DIHS/DRESS<sup>1,2</sup>. Raltegravir, the first HIV integrase inhibitor, is considered to have few adverse effects. Five previous cases of raltegravir-associated DIHS/DRESS were reported<sup>3</sup>. Notably, 5 out of 6 and 5 out of 5 cases occurred in women and patients of African ancestry, respectively (ethnicity unknown in one). The most important treatment intervention is early withdrawal of the offending drug.

# **Conflict of interest**

The authors declare that there is no conflict of interest.

#### Informed consent

Informed consent of the patient was obtained for publication of the case and images.

# Notice

The present case was published in abstract form at the "Global HIV Clinical Forum – Integrase Inhibitors", an international meeting held in Durban, South Africa, on July  $16^{\text{th}}$ , 2016 (Abstract O\_06).

# **REFERENCES**

- Gavilanes MC, Palacio AL, Chellini PR, Nery JA, Rego JG. Dapsone hypersensitivity syndrome in a lepromatous leprosy patient--A Case Report. Lepr Rev. 2015;86(2):186-90.
- Miller Quidley A, Bookstaver PB, Gainey AB, Gainey MD. Fatal clindamycin-induced drug rash with eosinophilia and systemic symptoms (DRESS) syndrome. Pharmacotherapy. 2012;32(12):e387-92.
- 3. Ripamonti D, Benatti SV, Filippo E, Ravasio V, Rizzi M. Drug reaction with eosinophilia and systemic symptoms associated with raltegravir use: case report and review of the literature. AIDS. 2014;28(7):1077-9.