A CASE REPORT: INDETERMINATE ERYTHRODERMA
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INTRODUCTION
Erythroderma, also referred to as exfoliative dermatitis, is a rare condition. It can potentially be a life-threatening condition that presents with diffuse erythema and scaling involving all or most of the skin surface area (≥90 percent). Its etiology is multifactorial—most commonly as a result of an acute exacerbation of a pre-existing inflammatory dermatosis. This also occurs when systemic corticosteroids are abruptly discontinued, immunosuppressant therapies are integrated, in phototherapy burns, with medications such as lithium and antimalarials, in systemic coinfections or HIV infection. Erythroderma may develop acutely (over hours or days) or evolve gradually over weeks to months. Patients typically present with erythematous patches that increase in size and coalesce into a generalized bright red erythema with occasional patches of sparing. Scaling takes place two to six days after the onset of erythema and may become widespread.

CASE PRESENTATION
A 65 year old male with a past medical history significant for schizophrenia and seizure disorder presents to the emergency department with a two-month history of a diffuse, erythematous, puritic rash. The patient had tried diphenhydramine and hydrocortisone cream with minimal relief. He was admitted to telemetry and treated with topical and IV corticosteroids, as well as IV antibiotics. Punch biopsies were performed revealing psoriasiform spongiotic dermatitis with eosinophils. The patient subsequently became septic, requiring admission to the ICU with intubation. After consultations from neurology and endocrinology, it was discovered that the patient had hypothyroidism and hormone replacement therapy was started. He was eventually weaned from the ventilator, transferred back to telemetry, and, after further stabilization, was transferred to a sub-acute rehabilitation facility.

REFERENCES

reprint from UpToDate, O., Roujeau, J. C., Mockenhaupt, M., & Corona, R. (2013). Drug reaction with eosinophilia and systemic symptoms (DRESS).

CONCLUSION
This case was unique because clinically it was difficult to ascertain the cause of erythroderma in this patient. There was high suspicion that the erythroderma was due to the switch of medication from Dilantin (which the patient had taken for years) to generic phenytoin. On biopsy, the results were non-specific and demonstrated the presence of spongiotic (edematous) dermatitis without evidence of pre-existing psoriasis.

According to the literature, spongiotic dermatitis is a characteristic of hypothyroidism. The erythroderma in this case appears to be a chronic presentation with an acute exacerbation, as the patient had symptoms for two and one-half months. Given the entirety of the patient’s signs and symptoms, hypothyroidism should be considered in the differential of erythroderma.