Episode 11

This week's episode the CPSers, Rabih presents an exciting *clinical unknown* to Reza!

Problem Representation
A 48-year-old man with epilepsy on antiepileptic medications presented with an acute macular rash on his trunk, fever, facial swelling, transaminitis, and eosinophilia.

Schemas
Reza uses a schema for febrile rash that highlights infectious, autoimmune, drug-related, and malignant etiologies of this clinical syndrome.

Diagnosis
Dermatology was consulted and made a diagnosis of **drug reaction with eosinophilia and systemic symptoms (DRESS)** based on the characteristic appearance of the rash, presence of facial swelling, & transaminitis in the presence of a *common offending medication* - lamotrigine.

Teaching points

- When evaluating a rash, it is important to describe the characteristics (i.e., blanching vs non-blanching), the distribution, progression, and associated symptoms.
- Some experts have recommended *renaming* DRESS to **"drug induced hypersensitivity syndrome" (DiHS)** given the fact that roughly a third of cases lack the characteristic hyper-eosinophilia.
- DRESS/DiHS is associated with potentially **life-threatening visceral complications**, with the liver (94%), kidneys (8%), lungs (5%), heart (2%), and CNS (2%) being to most frequently involved.

Clinical Reasoning Pearl

When the syndrome is nonspecific (e.g., "rash"), careful evaluation of the patient's **clinical context** can help narrow the range of diagnostic possibilities.

For example:
While DRESS/DiHS is *rare*, Reza recognized that the patient's anti-epileptic drug exposure was an important risk factor for this disease and helped highlight this possibility early on.

References

Cacoub P, Musette P, Descamps V, Meyer O, Speirs C, Finzi L, Roujeau JC. The DRESS syndrome: a literature review. Am J Med. 2011 Jul;124(7):588-97.