

A FATAL CASE OF DRUG RASH WITH EOSINOPHILIA AND SYSTEMIC SYMPTOMS (DRESS)

A Datta, DY Sue
Dept of Medicine, Harbor UCLA, Torrance, CA

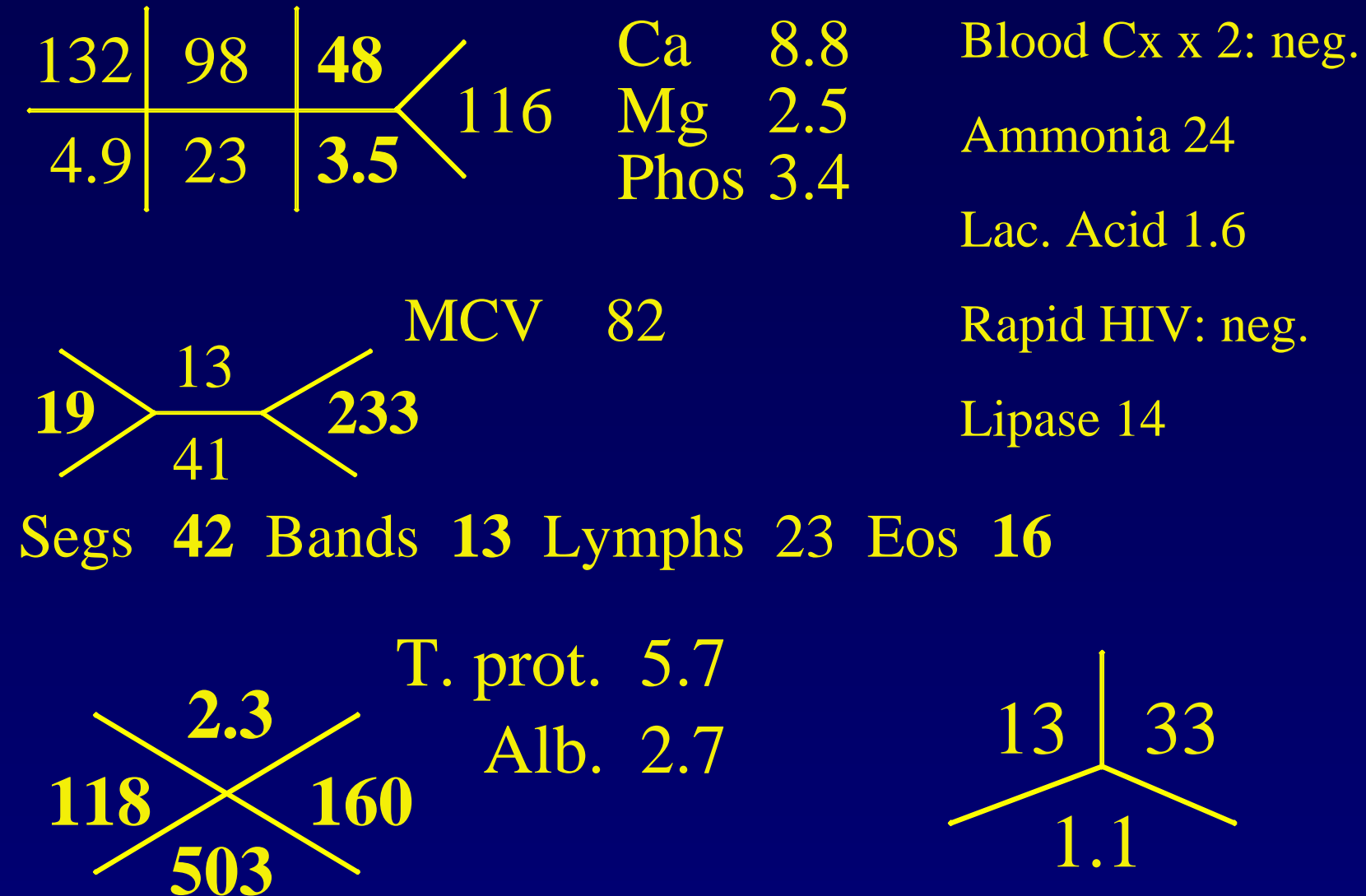
ABSTRACT

- A 55 year old woman presented with one week of flu-like symptoms, erythroderma involving the face, trunk, and extremities with palmar involvement, and temperature of 101.6 F.
- She had a history of polycystic kidney disease. She had been started on allopurinol for gout 2 months prior to admission.
- WBC 19K, with 13% bands and 16% eosinophils, AST 118, ALT 160, alkaline phosphatase 503, and total bilirubin 2.3.
- Allopurinol was discontinued, broad-spectrum antibiotics initiated, and supportive care provided.
- Despite these measures, the patient remained febrile with negative blood cultures, had persistently elevated AST, ALT and INR, and subsequently had a PEA arrest requiring mechanical ventilation, increasing pressor support, and continuous venovenous hemofiltration and dialysis.
- The patient received escalating doses of steroids and IVIG resulting in candidemia and bacterial sepsis, ultimately expiring on hospital day 21.

PHYSICAL EXAM

T_m 101.6, P135, BP122/62, RR 22
Gen: A+O x3, NAD
HEENT: PERRL, EOMI, mild scleral injection, erythematous tongue, no tonsillar exudates
Chest: CTA-B, no wheeze
CV: tachycardic, no m/r/g
Abd: distended, kidneys palpable to pelvis, soft, non tender
Extremities: no cyanosis, clubbing, or edema
Skin: Diffuse cutaneous edema/erythema, involving face, trunk, extremities, palmar involvement

DIAGNOSTIC STUDIES ON ADMISSION:



SKIN BIOPSY

Superficial perivascular dermatitis, with mixed infiltrate (no significant eos), occasional nuclear dust, extravasated RBCs, focal spongiosis, no keratinocyte necrosis, no vacuolar change. No fibrin in vessels. Consistent with early TSS vs early leukocytoclastic vasculitis.

Figure 1. Temperature Max (°F) vs Time (days)

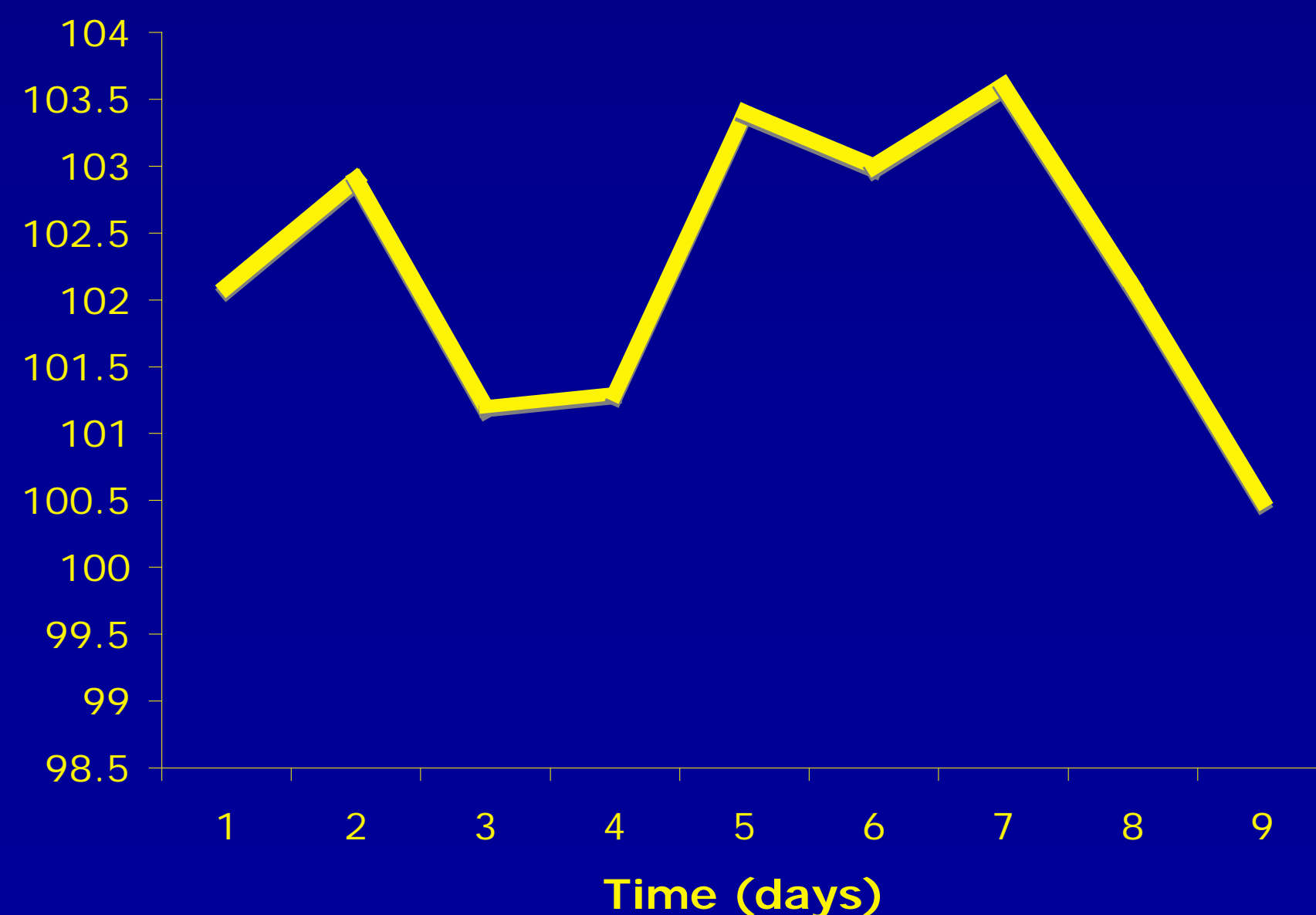
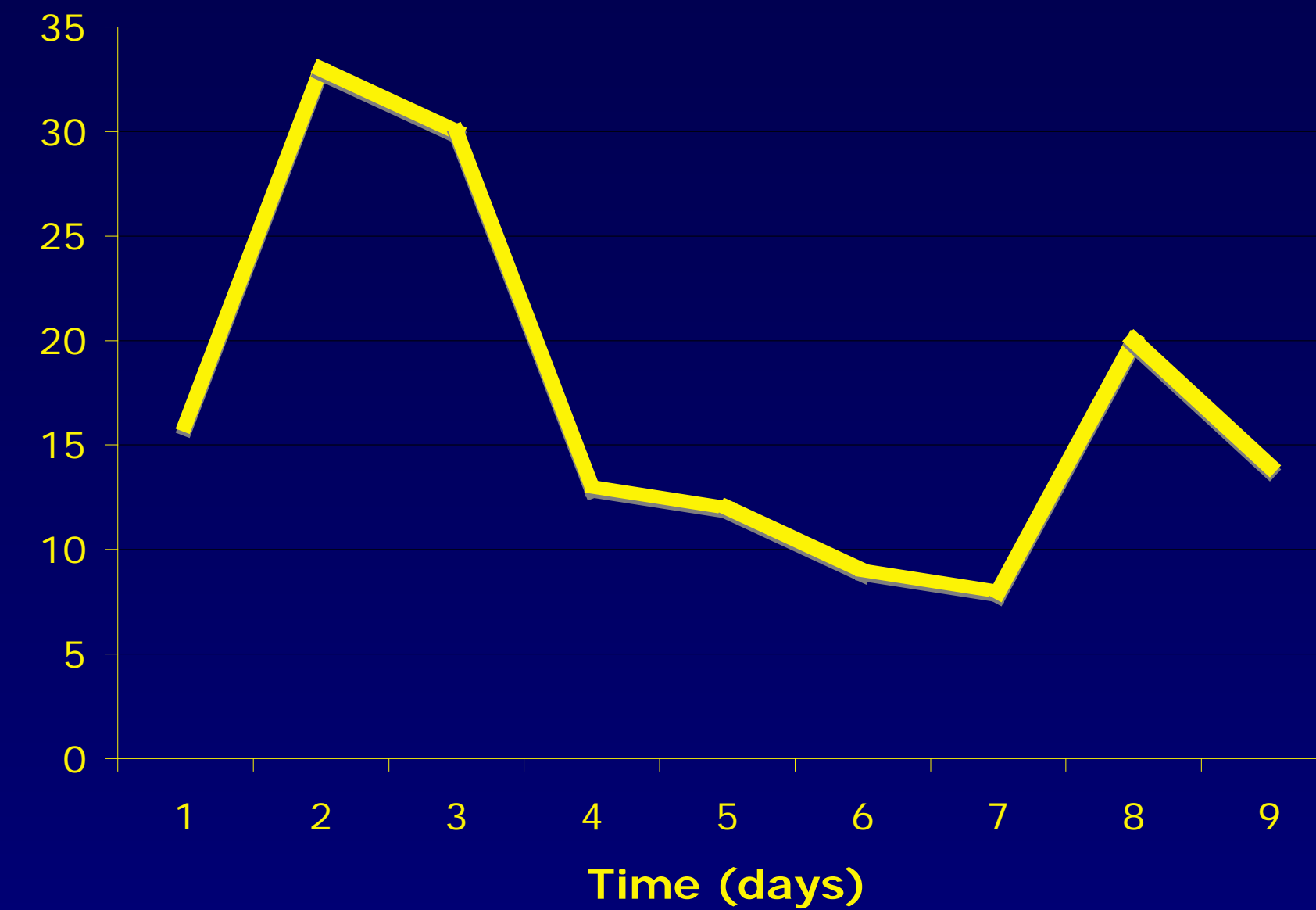


Figure 2. Eosinophils (%) vs Time (days)



Persistent Pressor Requirement (with and without CVVHD)

	CVVHD	Vassopressin	Norepinephrine	Dopamine	Dobutamine	Milrinone	Neosynephrine
Day 10	X		X				
Day 11	X	X	X	X	X		
Day 12	X	X	X				
Day 13		X	X	X	X		X
Day 14	X	X	X	X	X	X	X
Day 15	X	X	X	X	X	X	
Day 16	X	X	X	X	X	X	
Day 17		X		X	X	X	
Day 18	X	X	X	X	X	X	
Day 19	X	X	X		X	X	
Day 20	X	X	X		X	X	X
Day 21		X	X		X	X	X

Summary of Events, Days 15-21

- Day 15, Acyclovir started for possible HSV, all antibiotics dc'd given all blood cultures NGTD. Patient on Methylprednisolone 1 gm IV q day x3.
- Day 16, Family discussion, pt code status changed to DNR.
- Day 17, Patient noted to have sputum culture positive for occasional yeast, urine culture > 100,000 Candida albicans, and blood culture with 1/4 bottles with yeast, pt started on Micafungin.
- Day 18, Patient with positive blood culture, Enterococcus, Daptomycin started to cover for VRE. Methylprednisolone at 30 mg IV BID.
- Day 20, Methylprednisolone changed to 20 mg IV BID.
- Day 21, Patient asystolic, time of death 10:03 am.

- Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) is a drug-induced hypersensitivity syndrome characterized by skin rash, fever, and internal organ involvement.
- Various drugs such as antiepileptics, nonsteroidal anti-inflammatory drugs, allopurinol, sulfonamides and antibiotics have been associated with DRESS syndrome.
- The variable presentation and delayed timing of the drug reaction (usually 2-6 weeks) can make the diagnosis difficult; however, prompt recognition of the syndrome and withdrawal of the offending agent are essential in this potentially life-threatening reaction.
- DRESS syndrome continues to carry a high mortality of approximately 10%.