

Something Very Toxic: A rare case of toxic shock syndrome secondary to post partum endometritis

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Introduction

- Toxic Shock Syndrome (TSS) is a rare, but well recognized condition characterized by massive cytokine release from bacterial superantigens leading to abrupt onset of fever, diffuse rash, hypotension, and shock.¹
- Even if recognized early and aggressively managed, TSS is associated with mortality rates reported as high as 47%, making it a crucial diagnosis in the emergency department (ED).²
- Common causes of TSS include retained tampon, severe burns, or post-operative infections.¹

Patient Presentation

- 18-year-old female, G1P1, with no significant past medical or surgical history who is five days post partum from an uncomplicated vaginal delivery
- She presents with two days of fever, rash, abdominal pain and general malaise

Pertinent Physical Exam Findings

Maculopapular Rash

Rash involving trunk and extremities

Abnormal Vitals

HR 142, RR 23, BP 97/63, SPO2 99%, T 101.7F

Flushing

Facial flushing, ill appearing, hot to the touch

Suprapubic Tenderness

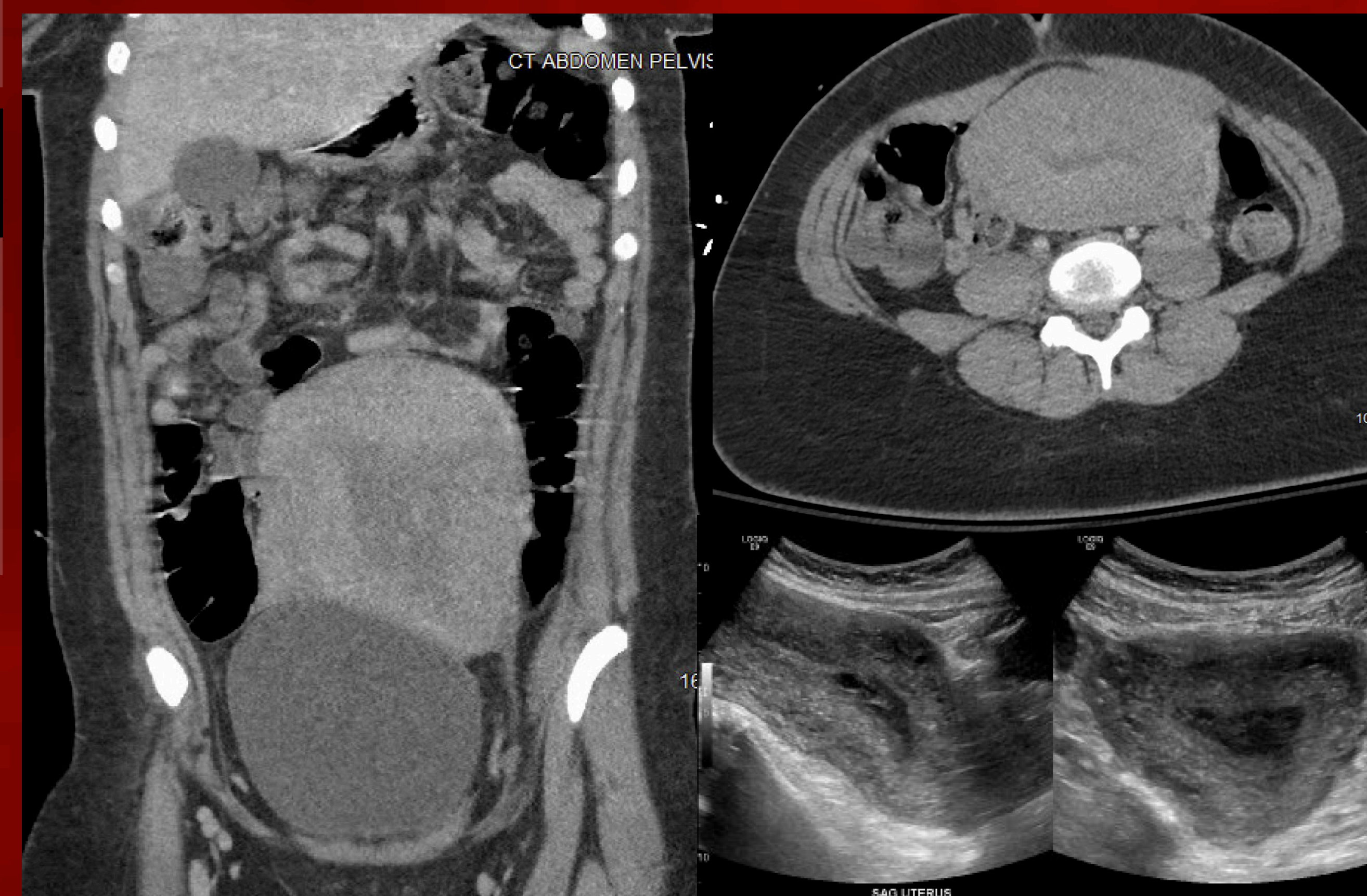
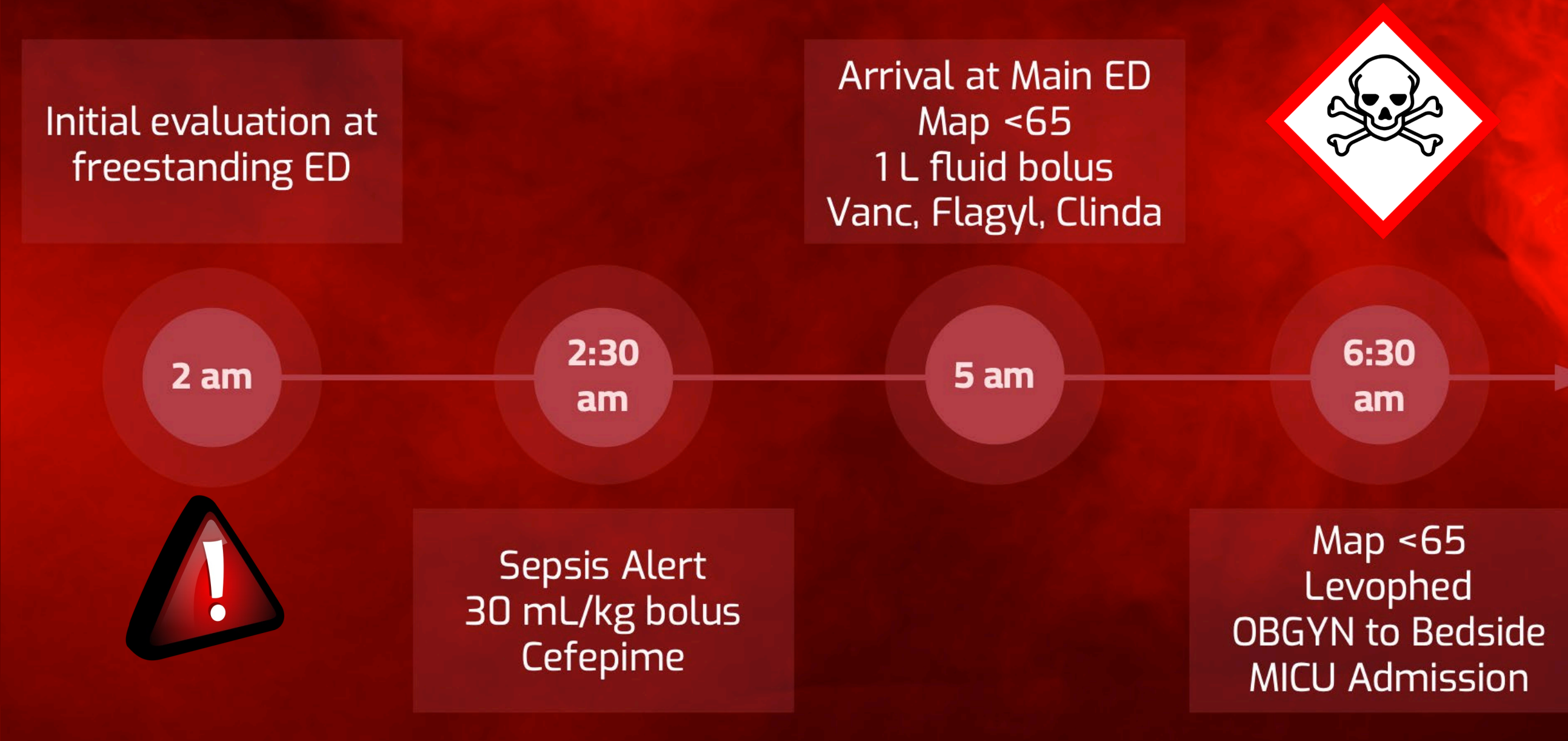
Pelvic: Foul smelling lochia, no retained foreign bodies



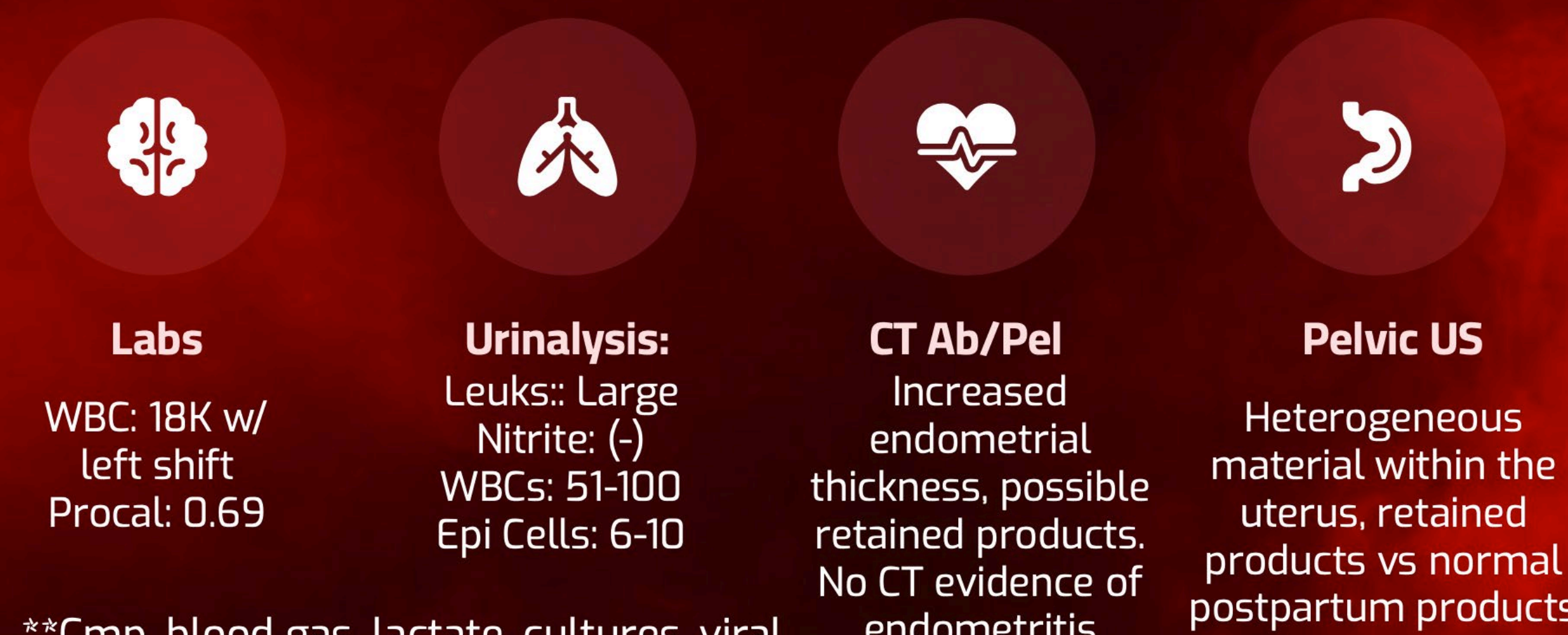
Differential Diagnosis

Endometritis	Foreign Body	Bacteremia	UTI
PID	Retained Products of Conception	TSS	

Timeline and Pertinent Interventions



Laboratory and imaging results



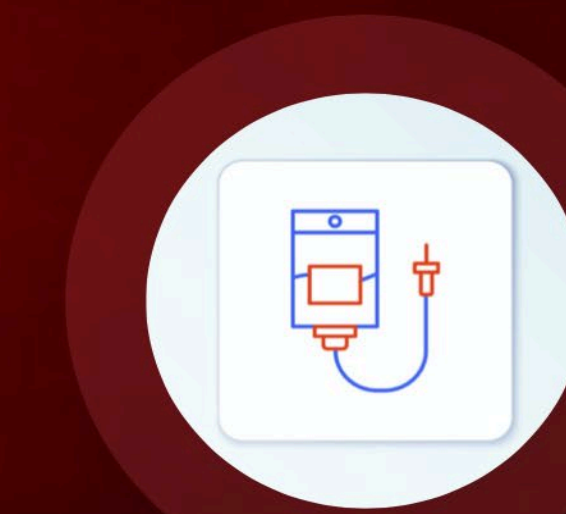
**Cmp, blood gas, lactate, cultures, viral panel, TSH/T4, CTA Pulm all WNL **

Case Outcome

- Despite 3.5L of LR, antibiotics, and vasopressors, the patient's condition rapidly declined. Within hours of admission, she required multiple vasopressors and stress dose steroids.
- She was taken to the OR with OBGYN for a complete abdominal hysterectomy. Her hemodynamics returned to baseline 2 hours after her procedure.
- The operative note described a boggy, edematous uterus murky peritoneal fluid and no retained products.
- Endometrial culture grew staph aureus.



Management of Toxic Shock Syndrome¹



Early recognition and resuscitation

Fluids, pressors, stress dose steroids. IVIG in severe cases



Antibiotics

MRSA coverage
Gram+, Gram -, and anaerobic coverage
Clindamycin



Source control

Removal of infectious source. In this case, the uterus.

Learning Points and Conclusion

- Antibiotic coverage for postpartum endometritis (clindamycin + gentamycin)³ differs from recommended antibiotic management for TSS.
- Definitive treatment for TSS is source control. In this patient, a surgeon, preferably an OBGYN, is necessary for source control (hysterectomy).
- Endometritis is a rare cause of TSS. To ensure optimal patient outcomes, ED providers must maintain a high suspicion for TSS to provide proper care and access to necessary specialty services

References

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