



Diagnostic Tests Practical Issues in ID

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TOPICS

- Acute phase reactants
- Non structural protein 1 (NS1) for dengue
- Galactomannan
- *Clostridium difficile* toxin

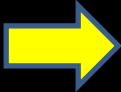
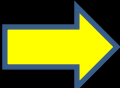
Acute Phase Reactants

- A major pathophysiologic phenomenon of inflammation and tissue injury
- Serum proteins \uparrow or \downarrow at least 25% during inflammatory states
- The effects of inflammatory molecule **“CYTOKINES”**
- Altered production by hepatocytes
- **IL-6**, IL-1 beta, TNF-alpha, IFN- γ
- Inflammation, healing, adaptation to noxious stimuli

Acute Phase Reactants

- **Erythrocyte sedimentation rate (ESR)**
- **C-reactive protein (CRP)**
- **Procalcitonin (PCT)**

Erythrocyte Sedimentation Rate

- The rate of RBC sediment in 1 hr (mm/hr)
- Pro-sedimentation factor (fibrinogen)
- Anti-sedimentation factor (zeta potential)
- Low sensitivity and specificity
- Monitoring response to therapy
- An inflammatory process  ↑ fibrinogen
 “rouleaux formation”