Procalcitonin

- Pro molecule of calcitonin secreted by parafollicular cells and neuroendocrine cells of GI tract
- Has been studied in multiple areas of medicine
  - Sepsis
  - Fever of unknown cause in children
  - Meningitis
  - Studied in patients with bacterial infections to monitor therapy
- Typically elevated to very high levels in invasive bacterial infections
  - Not so much Viral
  - Not so much Chronic disease inflammation
- Here at HFH not readily available to test
  - Send out per lab
  - Approximately 1 week to get back
- May be test in future to help differentiate bacterial from Viral source of infection
  - More studies needed
  - Need to have threshold level set

References:

- Gendrel Dominique, Raymond Josette et al. Measurement of procalcitonin levels in children with bacterial or viral meningitis 1997; Clinical infections disease 24: 1240 – 1242

Overall summary

- Helps to differentiate bacterial from viral causes of meningitis however more research needed
- Can be used and currently being studied for other implementations in management
  - Sepsis / Fever of unknown origin in children
  - Antibiotic Treatment monitoring