CLINICAL UPDATE

IMMATURE GRANULOCYTES AS PART OF INFECTION WORKUP FOR SEPSIS

Key facts about sepsis and how a unique parameter from Sysmex assists with diagnosis

1. **Sepsis is the leading cause of death in the ICU.**
   
   "The excellent diagnostic accuracy of IGs analysis on XN-9000 may represent a valid and reliable alternative to assessment of immature leukocytes with optical microscopy for diagnosing sepsis in the ICU."


2. **Bacterial infection is the most common cause of sepsis, but up to 50% of septic patients have negative blood culture results.**
   
   "Compared with the band count, the immature granulocyte count and the ANC were better discriminators of infected from non-infected patients with normal total leukocyte counts."


3. **Sepsis is difficult to diagnose in newborns because the symptoms are nonspecific.**
   
   "The statistical performance of the IG% in identifying neonates with sepsis was essentially identical."


4. **Early diagnosis of sepsis is crucial to successful treatment outcomes.**
   
   "The IG count significantly discriminates between infected and non-infected patients with a sensitivity of 89.2% and a specificity of 76.4%, particularly within the first 48 hours after SIRS onset."


5. **There is no one biomarker that is diagnostic of sepsis.**
   
   "The specificity of high percentages of immature granulocytes (>3%) for sepsis was greater than 90%."