Clinical utility and measurement of procalcitonin

ABSTRACT

Procalcitonin (PCT), regarded as a biomarker specific for bacterial infections, is used in a variety of clinical settings including primary care, emergency department and intensive care. PCT measurement aids in the diagnosis of sepsis and to guide and monitor antibiotic therapy. This article gives a brief overview of PCT and its use in guiding antibiotic therapy in various clinical settings, as well as its limitations. PCT performance in comparison with other biomarkers of infection in particular CRP is also reviewed. Owing to its greater availability, CRP has been widely used as a biomarker of infection and sepsis. PCT is often reported to be more superior to CRP, being more specific for sepsis and bacterial infection. PCT starts to rise earlier and returns to normal concentration more rapidly than CRP, allowing for an earlier diagnosis and better monitoring of disease progression.