C-reactive protein

C-reactive protein (CRP) is an annular (ring-shaped), pentameric protein found in the blood plasma, the levels of which rise in response to inflammation (i.e., C-reactive protein is an acute-phase protein). Its physiological role is to bind to phosphocholine expressed on the surface of dead or dying cells (and some types of bacteria) in order to activate the complement system via the C1Q complex.

CRP is synthesized by the liver in response to factors released by macrophages and fat cells (adipocytes).

It is a member of the pentraxin family of proteins.

It is not related to C-peptide (insulin) or protein C (blood coagulation). C-reactive protein was the first pattern recognition receptor (PRR) to be identified.

CRP is an inflammatory marker that has been revealed to be associated with the severity of COVID-19 [1].

Following uncomplicated craniotomy for microsurgery for brain tumors, C-reactive protein (CRP) peaked on post-op day (POD) 2 with a mean value of 32 ± 38 mg/l [2].

Values declined from POD 3 through 5, reaching a mean of 6.7 ± 11 on POD 5. These values may be lower than with most post-op infections.

C Reactive Protein (CRP) and Magnetic Resonance Imaging (MRI) are important diagnostic tools in Spinal instrumentation infection [3].

Early recording of C-reactive protein may prove useful in detecting those good grade patients who are at greater risk of clinical deterioration and poor outcome in aneurysmal subarachnoid hemorrhage [4].

Normal values

<0,50

References

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