C-reactive protein (CRP)

The C-reactive protein (CRP) test is an acute phase protein made by the liver and released into the blood within a few hours after infection, or other cause of inflammation. The CRP test is not diagnostic of any condition, but it can be used together with signs and symptoms and other tests to evaluate an individual for an acute or chronic inflammatory condition.

The CRP test is useful in monitoring people with chronic inflammatory conditions to detect flare-ups and /or to determine if treatment is effective. Some examples include:

- Inflammatory bowel disease
- Some forms of arthritis
- Autoimmune disease, such as lupus.

CRP may sometimes be ordered along with an erythrocyte sedimentation rate (ESR); another test detect inflammation. while the CRP test is not specific enough to diagnose a particular disease, it does serve as a general marker for infection and inflammation, thus alerting technical that further testing and treatment may be necessary. depending on the suspected cause, a number of other tests may be performed to identify the source of inflammation.

The erythrocyte sedimentation rate(ESR) test will also be increased in the presence of inflammation; however, CRP increases sooner than decreases more rapidly than the ESR.

Material of CRP kit

1. Latex reagent: the latex reagent should be well shaken to ensure homogeneity.
2. Positive control (Red label)
3. Negative control (Blue label)
4. Serum
5. Timer

Procedure

1. Place **1 drop** of patient serum and from control on latex paper
2. Add **1 drop** of latex reagent for each drop, mix well with wooden stick
3. Examine the teat for **3 min**

   Positive: agglutination

   Negative: non agglutination

Principle

Latex particles coated with goat anti-human CRP antibodies are agglutinated when mixed with serum containing CRP.