



Capital Health

MEMORANDUM

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FROM: Dr. Irene Sadek, MD, FRCP(C), Chief of Service
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Division of Clinical Chemistry

RE: UPCOMING CHANGES in ordering Erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP)

DATE: March 13, 2012

Please note, that in compliance with the National and International guidelines, **effective April 1st** Erythrocyte sedimentation rate (ESR) and a C-reactive protein (CRP) will not be performed if ordered simultaneously.

- 1. If both CRP and ESR are ordered together, only the CRP will be performed. This applies to both inpatients and outpatients.**
- 2. CRP is available 24/7.**
- 3. If an ESR is ordered as the only test, the clinical indication needs to be provided. ESR will NOT be available on evenings and nights, except for urgent requests from Emergency Department.**

In general, CRP is the preferred test for evaluating patients with suspected infection or inflammation as it shows a rapid response to infection/inflammation, increasing within hours of stimulus and rapidly returning to baseline levels following resolution.

ESR increases after several days following stimulus and slowly returns to baseline levels after several weeks.

CRP, unlike ESR, is **not** significantly affected by age, gender or conditions such as anemia, pregnancy and plasma protein changes.

CRP mg/L	Interpretation
>8 to < 40	Suggests mild inflammation, viral or bacterial infection
40 to < 100	Suggests moderate inflammation, vasculitis, viral or bacterial infection
100 to < 200	Suggests marked inflammation, vasculitis or bacterial infection
> 200	Suggests severe bacterial infection, severe arthritis

Additional information can also be obtained from the New Zealand Best Practices Advisory Committee web site: www.bpac.org.nz .

We believe this change in ordering practice will support safe patient care. Please do not hesitate to contact Dr. Bassam Nassar at bassam.nassar@cdha.nshealth.ca or Dr. Irene Sadek at irene.sadek@cdha.nshealth.ca if you have any questions or concerns.