



DATE: February 22, 2016

TO: All Physicians at HHS and SJH, Residents, Clinical Managers, Clinical Educators

FROM: Dr. Tony Chetty, Discipline Director Clinical Chemistry and Immunology

RE: **ESR Testing**

Please note that effective March 14, 2016, the HRLMP will be restricting requests for ESR testing. ESR testing will only be performed at one site and the turnaround time will be considerably longer.

hsCRP is the preferred test over ESR as it is automated, more accurate, and has a faster turnaround time. hsCRP has the following advantages over ESR:

- CRP shows a rapid response to infection and inflammation and returns rapidly to normal following resolution.
- CRP is not affected by conditions such as pregnancy, anaemia or plasma protein variations.
- CRP is not affected by temperature, drugs (e.g. steroids, salicylates) or smoking.

Our Recommendations:

Choose hsCRP in most situations where you want to measure inflammation.

Do not request CRP and ESR simultaneously - this will require biochemist approval!

References:

1. CADTH Health Technology Assessment, No. 140: Canadian Agency for Drugs and Technologies in Health; 2015 Nov:1-66.
2. Ontario Association of Medical Laboratories. Guideline for the ordering of erythrocyte Sedimentation Rate (ESR). Revised 2001. [Guidelines for clinical laboratory practice]. Retrieved November 19, 2010 from OAML web site at <http://www.oaml.com/PDF/CLP023.pdf>
3. Olshaker JS, Jerrard DA. The erythrocyte sedimentation rate. J Emerg Med 1997;15(6):869-874.
4. Lane SK, Gravel JW Jr. Clinical utility of common serum rheumatologic tests. Am Fam Physician 2002;65(6):1073-1080.
5. An HS, Seldomridge JA. Spinal Infections. Diagnostic tests and imaging studies. Clin Orthop Relat Res 2006;444:27-33.
6. Colombet I, Pouchot J, Kronz V, et al. Agreement between erythrocyte sedimentation rate and C-reactive protein in hospital practice. Am J Med. 2010 Sep;123(9):863.e7-13.

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