



ESR – Inflammatory Response Marker? No

Introduction

The ESR has a longstanding use in clinical medicine but has significant limitations. Previous best practice guideline publications have identified that **C-reactive protein (CRP)** is the preferred investigation for the assessment for a possible inflammatory or infective disorder. Additionally it is seldom appropriate for both ESR and CRP to be requested together.

Current situation

Approx. 11% of Haematology requests include an ESR – no significant change in practice since 2009, with 1 in 3 results outside of the reference interval, but only 3 % have significantly abnormal values (> 40 mm/hr).

Inference

Data indicates that a significant number of ESR being requested, with no significant change in practice over past 16 years.

Way forward

- Please review your Haematology ordering practice – ESR testing¹.
- Use BPAC best practice guidelines – ESR requesting².
- ESR demand management.

Demand Management - ESR

As from 13th June 2016 we will be triaging all ESR requests.

ONLY ESR requests with clinical details consistent with good practice will be processed (+ No clinical details no test).

Consultation Period

We request that any issues related to this practice should be discussed / emailed to Dr Stephen May, so that we may consider any inclusions to this proposed practice*and present to the clinical governance board.

*This practice has been adopted by majority of NZ laboratories.

1. [Laboratory Schedule and test guidelines](#)
2. BPAC [The New Zealand Laboratory schedule and test guidelines: Haematology tests](#)

Good practice² Indications for use of ESR: The ESR may have some advantages in the assessment of the following conditions:

- Systemic lupus erythematosis;
- Rheumatoid arthritis;
- Kawasaki Disease;
- Rheumatic fever;
- Hodgkin lymphoma;
- Temporal arteritis (initially presentation ESR & CRP recommended³);
- Inflammatory bowel disease in children (initial assessment).

The ESR should **not** be used to screen for plasma cell dyscrasias; if these conditions are suspected, protein electrophoresis etc. should be used.

* CRP or ESR (or both) can be raised in giant cell arteritis (temporal arteritis) and given the significant potential for morbidity in people with giant cell arteritis, it is recommended that both are requested in the initial presentation.

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CLINICAL UPDATE