

Sample

2013 UPDATE:

Investigating iron deficiency anaemia

Practical tips and information for investigating iron deficiency anaemia^{1,2}

- Microcytic anaemia is defined as a mean cell volume < 80 fL and haemoglobin levels below what would be normal for a person's age and sex
- The most frequent cause of microcytic anaemia in New Zealand is iron deficiency
- The cause of iron deficiency anaemia always needs to be investigated, some of the primary causes are: obstetric/gynaecological (e.g. menorrhagia or pregnancy), gastrointestinal bleeding, malabsorption (e.g. coeliac disease), medicines that cause gastric erosions/ulcerations and those that interfere with coagulation/platelet function, dietary deficiency (e.g. vegans), or other reasons (e.g. blood donation, trauma, surgery)
- Treating iron deficiency anaemia:
 - If appropriate, prevent further blood loss by treating the underlying cause, e.g. reduce menstrual loss in premenopausal women
 - Review and correct any dietary factors; patients diagnosed with coeliac disease should begin a gluten free diet
 - Patients with uncomplicated iron deficiency can be given a trial treatment with oral iron supplementation to correct anaemia and replenish physiological stores

Ferritin should be used to investigate suspected iron deficiency anaemia³

- Serum ferritin alone is a highly sensitive test of iron deficiency in patients with otherwise good health. Iron studies (serum iron, iron binding capacity and serum transferrin) should not be ordered as initial first-line tests.
- Iron studies may be indicated if iron overload is suspected, or other comorbidities are known or suspected. If serum ferritin is increased (iron deficiency is unlikely with ferritin levels over 100 micrograms/L), iron studies may be requested for further investigation.

Testing for iron deficiency anaemia – Encouraging results!

- Although the total number of tests to investigate anaemia have risen in New Zealand over the last four years, the proportion of these that are ferritin only tests has increased from 53% in 2010 to 68% of tests in 2013. This is a substantial increase in appropriate testing. Figure 1 below shows the breakdown of anaemia testing as a percentage of ferritin only and iron studies tests that were performed nationally and for your practice population over the last four years.

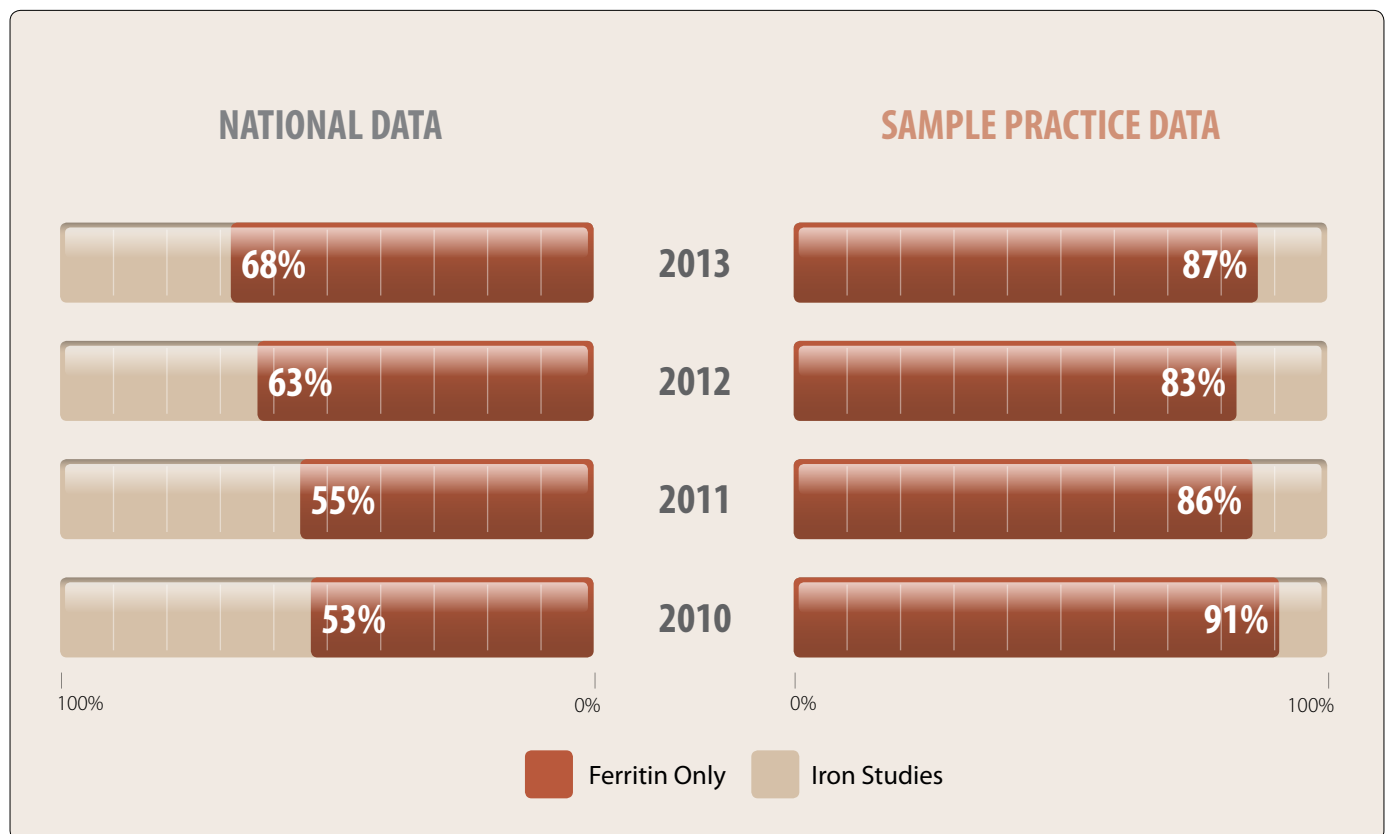


Figure 1. The percentage of ferritin only and iron studies tests performed nationally and at your practice, 2010-2013. Data obtained from the Laboratory claims collection. Data for your practice includes tests ordered by any health professional during this period.³

See Best Tests, September 2013 for further information on investigating anaemia: www.bpac.org.nz/BT

1. Provan D. ABC of Clinical haematology. 3rd ed. Oxford: Blackwell Publishing; 2007.

2. National Institute for Health and Care Excellence (NICE). Clinical Knowledge Summaries. Anaemia - iron deficiency. NICE; 2013. Available from: <http://cks.nice.org.uk> (Accessed Dec, 2013).

3. Van Vranken M. Evaluation of microcytosis. Am Fam Physician. 2010;82(9):1117-22.