

Laboratory Update

Primary Care Laboratory Interface Group (PLIG)
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Vitamin D testing in primary care

Please note vitamin D testing is usually only indicated in:

- Suspected osteomalacia/rickets (i.e. bone pain, abnormal Ca^{2+} , ALP with a normal GGT, and/or phosphate).
- Malabsorption syndromes

Fatigue in isolation is definitely not an indication for vitamin D measurement.

Many individuals in Scotland will have borderline low vitamin D levels in the winter months and therefore supplementation should be recommended as per CMO guidance¹.

Troponin testing in primary care

The primary role of troponin testing is to rule out a myocardial infarction (MI). Patients presenting with symptoms suggestive of MI should be referred acutely to secondary care for assessment in accordance with 'Chest pain of recent onset: assessment and diagnosis' NICE CG95 2016².

Troponin levels may be elevated in patients with acute illness for reasons other than acute coronary syndrome. These include heart failure, tachy- or bradyarrhythmia, pulmonary embolism, inflammatory disease (e.g. myocarditis), sepsis, and acute neurological disease (e.g. stroke)³.

If you do request a troponin level in primary care, please consider whether acute hospital admission would be more appropriate. If it is still felt that troponin measurement in primary care is indicated, then please be aware that elevated results will be reported to unscheduled care if the result is generated out-of-hours. **To assist with clinical management in this scenario please provide appropriate clinical detail via e-KIS .**

CA125 and Menstruation

CA125 levels can be elevated by up to x3 normal levels if the assay is taken during menstruation. Therefore CA125 testing should be performed when the patient is not menstruating in order to reduce false positive results. An ICE pop-up has been added to remind clinicians of this.

CA125 can be elevated in non-ovarian pathology. Non-ovarian malignant causes include colonic, rectal, liver, or lung cancer. Non-malignant causes of elevation include ascites, peritoneal or pleural inflammation, benign ovarian cysts, endometriosis, uterine fibromyomata (fibroids), pelvic inflammatory disease and cirrhosis⁴.

ICE/GPOC labels

Please print ICE/GPOC labels as close as possible to the time at which the sample is obtained and sent to the laboratory. Samples submitted days after printing may be declined by labs due to being 'old'.

Arranging Urgent Micro Samples

For practices closest to **RIE/SJH**:

- Please contact the microbiology laboratory at RIE/SJH in advance and arrange for the sample to be sent direct to RIE labs in a brown paper envelope marked "urgent".

For practices closest to **WGH**:

- If very urgent please follow instructions above and arrange for sample to be sent direct to RIE.
- If less urgent (e.g. sample has missed the last lab transport van on a Friday) then the sample could be transported to the WGH lab and the sample will then be sent on to the RIE microbiology lab on the next lab van, which may be the following day. Please inform the WGH prior to sending.

Faecal calprotectin > 50 years

Faecal calprotectin testing is recommended as an option to support clinicians in differentiating between a diagnosis of inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS). This test is only suitable for adults <50 years with recent onset lower gastrointestinal symptoms for whom specialist assessment is being considered and cancer is NOT suspected. Recent onset of lower gastrointestinal symptoms in patients aged >50 years are significantly more likely to be associated with malignancy. Faecal calprotectin for diagnostic purposes is not recommended for patients in this age group and referral for lower gastrointestinal endoscopy should be considered.

Calprotectin levels will often be very elevated during episodes of acute gastroenteritis and testing in this context is not recommended unless there are ongoing symptoms or diagnostic uncertainty. It is therefore advised that faecal calprotectin is only used when symptoms persist beyond 2 weeks duration.

Save the date

The annual laboratory medicine update evening meeting will be held on **Thursday 23rd January 2020**. Booking will be available in December 2019. Further communication will be sent regarding this.

Further information and feedback

Information on all of the recent work carried out by PLIG can be found at <http://www.edinburghlabmed.co.uk/PLIG/Announcements/Pages/default.aspx>. This includes all of our recent communications as well as presentations from the laboratory medicine update meetings. We are very keen to hear from you with regard to any primary care laboratory interface issues. Please send any questions or comments to sara.jenks@nhslothian.scot.nhs.uk or clare.macrae@nhslothian.scot.nhs.uk.

References:

1. CMO guidance on vitamin D <https://www.cps.scot/media/1987/cmo-unnumbered-letter-issued-on-24-november-2017-final-new-recommen.pdf>
2. Chest pain of recent onset: assessment and diagnosis. NICE CG95.
3. ESC acute coronary syndrome guidelines <https://academic.oup.com/eurheartj/article/32/23/2999/477824>
4. Association for Clinical Biochemistry CA125 guidance <http://www.acb.org.uk/Nat%20Lab%20Med%20Hbk/CA125.pdf>