

1st March 2011

Dear GP and Practice Nurse Colleagues,

Changes to Urine diagnostics 7th March 2011 - RIE Microbiology laboratory.

In line with national guidance, the RIE Microbiology Laboratories will be changing the way that urines are processed. Currently urines are universally checked for cells, and then only a positive sub-group cultured. **The key change is that ALL urines will be cultured but microscopy will be performed on a minority of samples only (see below), where the value of microscopy is supported by evidence-based guidelines.** The advantage is that universal culture is better at detecting infection in some patient groups, notably pregnancy. This pathway is recommended in the diagnosis of UTI in the SIGN 88 guidelines for adults, & the NICE guidance for children (<http://www.nice.org.uk/CG54>).

Urine microscopy will automatically be undertaken in:

- **Samples from children under 3**
- **?glomerulonephritis**
- **post-renal transplant patients**

This change in practice has implications for GPs who rely on microscopy, rather than dipsticks, to detect haematuria. Modern dipsticks are now recognised to be extremely accurate, and are much more cost-effective than laboratory testing. More importantly, community-based urine samples sent for microscopy have a significant false negative rate. The laboratories, in negotiation with GP representatives, recognise that withdrawing the microscopy service altogether might cause diagnostic difficulties, so it is still available on request for this purpose. However, in view of the national evidence-based guidance, we would encourage all GPs to consider using dipsticks instead, for detecting haematuria.

How do I request Microscopy?

Please write MICROSCOPY in capital letters in the clinical details section of the form, with the indication. In the long term, request forms will be adjusted to reflect this change. It is also possible to request the test by phoning 0131 242 6048 between the hours of 9 -5, Monday - Friday. Urine samples are kept for a week.

What is happening at the St John's Hospital Laboratory?

There is no change for SJH users at present- see guidance notes.

Any further questions?

Guidance notes are included at the end of this letter

If you have urgent or patient-specific question these can be addressed through

- For urgent queries the duty microbiologist through our office (242 6048) , or
- Email to GP.MicroAdvice@luht.scot.nhs.uk (Microbiology Advice, GP in the directory)

With best wishes,

Yours sincerely

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Guidance Notes

What is happening at the SJH Laboratory?

There is no change for SJH users at present: SJH currently cultures all samples. The method used for processing St Johns uses microscopy as part of the laboratory protocol. We plan to look at the processing method in more detail but we do not wish to delay the change at RIE whilst this work is ongoing.

My practice does not currently dipstick urines for haematuria. Can I request microscopy for this?

We will accept requests for microscopy for haematuria where a Practice does not currently have access to dipstick testing. However, it is hoped that in the longer term, GPs will introduce the service, as dipstick testing is recognised as the current best method for detecting microscopic haematuria in community samples.

How is dipstick testing done?

The MHRA has produced a quick reference guide to this topic.

<http://www.mhra.gov.uk/Publications/Postersandleaflets/CON2023434>

Dipsticks are available through a number of suppliers. Lothian LMC is seeking ways of procuring these at no cost to the practice.

When should we screen for haematuria?

The Renal Association and British Association of Urologists have produced guidance on when clinically-indicated urine dipstick testing should be done:

<http://www.baus.org.uk/AboutBAUS/publications/haematuria-guidelines>

There is no need to confirm a positive result by microscopy. The guidance also states that there is no evidence to support opportunistic screening of the general population. The recommendations are largely in line with those on Refhelp.

How should I manage a patient with haematuria?

Guidance on investigation of Haematuria is on the Lothian Referrals Guidelines website –RefHelp- and is not altered by this change. The site contains guidance on both types of haematuria:

- microscopic (<http://www.edren.org/pages/gpinfo/haematuria---microscopic.php>)
- macroscopic (<http://www.edren.org/pages/gpinfo/haematuria---macroscopic.php>).

Should we use dipstick testing in UTI?

Dipstick testing may be useful in children above the age of 3 years old.

Dipstick testing is not routinely recommended in adults. SIGN 88 suggests it may be helpful in women with limited symptoms where it may identify a group with negative dipsticks who need to be counselled about whether they wish a trial of antibiotics for their symptoms.

Dipstick screening should not be used in patients with urinary catheters.