28 SEPTEMBER 2011

AOTEA PATHOLOGY

AoteaUpdate

Changes to reporting and interpretation of **Haemoglobin A1c**

Haemoglobin A1c will be reported only in units of mmol/mol, from 3 October, 2011.

This completes the process started in 2009, when dual reporting in both percent and mmol/mol units was introduced to allow everyone to become familiar with units in mmol/mol.

The comments that accompany results for HbA1c have been standardised nationally and refer to significance of the results, stated clearly in intervals of mmol/mol.

The New Zealand Society for the Study of Diabetes (NZSSD) strongly supports the change of units and has approved the comments.

Information packs

Most practices will have received information packs from the Ministry of Health announcing the change. The packs include conversion tables.

Laboratories will not provide conversions of mmol/mol back to percent.

The Diabetes UK website has a calculator and other information about the new units at http://www.diabetes.org.uk/hba1c.

HbA1c is the recommended test for diagnosis of type two diabetes

NZSSD now recommends HbA1c as the preferred test for screening and diagnosis of type two diabetes.

This is a change from their previous policy statement and is in line with clinical practice guidelines from the American Diabetes Association. The World Health Organisation also endorses using HbA1c for diagnosis.

A major benefit is that fasting is not required.

The full position statement from NZSSD and an executive summary can be seen at http://www.nzssd.org.nz/.

The summary describes what to do following a screening test for type two diabetes.

Non-fasting HbA1c is the preferred test

Non-fasting HbA1c is the preferred test but NZSSD provides information for when fasting glucose is also measured and the tests are discordant.

In brief:

- levels of HbA1c 50mmol/mol or more on two occasions confirm diabetes.
- levels of 41-49 are borderline and require advice on diet and lifestyle modification.
- results of 40 or less are normal and should be repeated only at the interval suggested in cardiovascular guidelines for that individual.

Nationally agreed comments will be attached to the laboratory report to indicate these categories.

Oral glucose tolerance test (OGTT) is rarely required

The important message is that this process and the guideline for follow-up mean the OGTT is virtually obsolete.

Glucose based criteria for diagnosis will be necessary only in patients who have

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conditions which interfere with accurate assessment of HbA1c.

These include conditions in which red cell survival is shortened and some thalassaemias.

In such circumstances, fasting glucose should be used as the screening test, but even then follow up OGTT should very rarely be necessary.

In particular, two fasting glucoses at 7.0mmol/L or more are sufficient for diagnosis, and it is not necessary to follow up impaired fasting glucose or intermediate levels of HbA1c with an OGTT.

These recommendations do not apply to gestational diabetes. The current glucose challenge should be used, with follow up OGTT when indicated.

Richard Medlicott, a GP from Island Bay Medical Centre, demonstrates how to access information from eLab, our new, online, test ordering tool. Dr Medlicott is watched by Aotea eLab project team member Daniel Mulholland and Minister of Health Tony Ryall, who launched eLab this month.

Find out more about eLab over the page >>

Rotavirus testing by request only

We no longer routinely add rotavirus testing on faecal specimens from preschool children.

Testing is now performed only when a referring clinician has requested it.

A review of our data showed a positive result was more likely in samples following a specific request for the test.

bpac guidelines recommend considering rotavirus as a cause of diarrhoea in the under-five-years age group.

Where rotavirus testing has not been requested and other microbiology tests are negative, please consider other causes of infectious diarrhoea and submit a further faeces specimen for testing, if clinically indicated.

Anita Worrall
TECHNICAL LABORATORY MANAGER

For guidelines for testing see 'Laboratory investigation of infectious diarrhoea, January 2008' at http://www.bpac.org.nz.

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Glucose challenge – in the morning and no leaving the collection room

A glucose challenge test provides the most reliable results if it is done in the morning and the patient remains resting at the collection room after drinking the glucose.

We have changed our protocol to reflect this.

We now strongly discourage patients leaving the collection room and require that they come for the test before lunch.

Our current information sheets tell patients they may leave the laboratory after finishing the drink. We will be changing this and also emphasising that they should not eat, drink (other than water), smoke or do vigorous exercise until we collect the post-load sample.

The glucose challenge is a screening test. It is important we minimise the potential for false negative results, particularly those resulting from exercise before the post-load sample is collected.

So we have standardised our requirement for patients to stay at the collection room for one hour for the glucose challenge, similar to the two hours they stay for the glucose tolerance test.

eLab roll-out starting shortly

Our roll-out of eLab – an online tool for you to order tests and access test information – starts shortly, following Minister of Health Tony Ryall's launch of the tool earlier this month.

We are putting together a training pack for you and will also provide training assistance. The doctors who have trialled eLab have helped make it user friendly and we are looking forward to working with you on it.

The tool lets doctors enter information directly into an online form that our laboratory systems can read and instantly make available to our staff. This direct data entry into our systems will greatly reduce the risk of human error from manual data entry.

The tool also lets doctors access relevant test information from Aotea Pathology.

For patients, eLab will mean more peace of mind that we have the correct information from their doctors and that they are properly prepared for specimen collection.

If ever required, the data can also easily be used by other service providers such as other laboratories. This is a planned fit with the government's move to by 2014 have patients' medical information available in a standardised data set that can be used in a range of electronic systems – where-ever a patient needs to access it.

Over time, we think the majority of laboratory requests from primary care will be made using electronic ordering.

Minister of Health Tony Ryall, Aotea staff member Yvonne Ong and Aotea chief executive Karen Wood discuss eLab at its launch this month.

Future plans for eLab include using it for specialist and interlab referrals.