



Change to Lipid Reporting

1st February 2016

Detailed below are the changes we will be making to the reporting of lipid results for all patients in the Waikato and BOP regions

Patients < 19 years old.

In this age group reference intervals derived from healthy individuals (Caliper study) (8) are reported. These reference intervals provide a yardstick to help differentiate “normal” from “abnormal” when investigating hereditary lipid disorders.

Age range	Triglycerides	HDL	Total Cholesterol
0 - 14 days	0.9 - 3.0	0.4 - 1.1	1.2 - 3.2
15 days - 1 year	0.6 - 3.0	0.3 - 1.9	1.6 - 6.2
1 - 19 years	0.5 - 2.3	0.8 - 1.9	2.9 - 5.4

Comments, based on the Simon Broome criteria for the diagnosis of familial hypercholesterolaemia (FH) are added to assist with the detection of FH:

Patient < 16 years and LDL is > 4 or patients ≥ 16 years and LDL is > 4.9

“LDL cholesterol is elevated. Consider hereditary causes but exclude secondary causes first.”

Patients < 16 years and Total Cholesterol is > 6.7

“Total Cholesterol is elevated. Consider hereditary causes but exclude secondary causes first.”

Patients ≥ 16 years and cholesterol > 8

“Lipid lowering treatment is usually recommended when Total Cholesterol or TC:HDL ratio is > 8. Treatable secondary causes of dyslipidaemia should be considered first and excluded before starting lipid medication. Hereditary causes of dyslipidaemia should be considered.”

Patients ≥ 19 years.

Lipid reporting will be changed to reflect the MOH Cardiovascular Disease Risk (CVD risk) assessment guidelines published in 2013 (2).

The overarching principle is that the intensity of interventions should be proportional to the size of the estimated combined CVD risk. This remains unchanged from previous recommendations.

- All patients benefit from healthier lifestyles.

- Most patients with estimated five-year combined CVD risk below 10 percent can generally be well managed without drug treatment.
- For patients with estimated five-year combined CVD risk between 10 percent and 20 percent, a discussion about the benefits and harms of blood pressure (BP) lowering and lipid-lowering drugs should inform a shared decision either to initiate lifestyle measures only, or to add BP- or lipid-lowering drugs or both.
- Most patients with a combined CVD risk over about 20 percent in five years and all patients with a personal history of CVD are likely to benefit significantly from both BP- and lipid-lowering drugs and antiplatelet drugs, over and above intensive non-pharmacological interventions.

Updated reporting:

Comments are added based on lipid results

Total cholesterol (TC) is ≥ 8 mmol/L or TC:HDL ratio ≥ 8 :

"Lipid lowering treatment is usually recommended when Total Cholesterol or TC:HDL ratio is > 8 . Treatable secondary causes of dyslipidaemia should be considered first and excluded before starting lipid medication. Hereditary causes of dyslipidaemia should be considered."

Total cholesterol (TC) is < 8 mmol/L and TC:HDL ratio is < 8 :

"A combined CVD risk, of which lipids is one component, should be estimated to guide CVD risk management decisions. If lipid modifying medication is considered, suggest checking first for treatable secondary causes of dyslipidaemia."

LDL is > 4.9 mmol/L

"LDL cholesterol is elevated. Consider hereditary causes but exclude secondary causes first."

Triglyceride > 10 mmol/L:

"Triglyceride levels above 10 mmol/L are associated with increased risk of pancreatitis. Secondary causes such as obesity, high alcohol intake and impaired glucose tolerance or diabetes should be considered."

HDL > 2.5 mmol/L:

"An elevated HDL is not always associated with decreased CVD risk."

References

- (1) <https://app3.ccb.sickkids.ca/caliper/calipersearch>
- (2) <http://www.health.govt.nz/system/files/documents/publications/cardiovascular-disease-risk-assessment-updated-2013-dec13.pdf>

If you have any queries or concerns to this change in our service please do not hesitate to contact me

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