NHS Lothian Primary Care Summary Guidance for the Investigation & Management of Hypertriglyceridaemia November 2017

A Guide to Best Practice in Lothian revised in line with 2016 updated NICE Guidelines

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Triglycerides (TG) (mmol/L)

- Routinely measured as part of a full lipid profile to enable LDL calculation.
- TG testing in isolation is rarely indicated.
- Can be elevated on a non-fasting sample due to the presence of dietary TG, consider fasting sample.
- Very high TG levels e.g. >10mmol/L are associated with pancreatitis; increased morbidity and mortality independent of CVD risk.
- High TG are most commonly due to secondary causes e.g. poorly controlled diabetes mellitus, alcohol excess or medications.
- The relationship between TG and cardiovascular risk is unclear. Overall it is felt that raised TG still confer a small degree of additional risk.

Raised TG

e.g. >5mmol/L on a random sample

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Repeat fasting lipid profile to confirm in 1-2 weeks

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If fasting TG raised at >2.5

- Assess & treat secondary causes†
- Give lifestyle & dietary advice*
- Repeat fasting lipid profile after above interventions

Clinical assessment

Check BP, measure weight/BMI, smoking status & alcohol intake
Examine for any skin changes suggestive of a primary hyperlipidaemia
Check TFTs, fasting blood glucose (click here for more information on the diagnostic work-up for diabetes), renal function, liver function, MCV and GGT
† Consider any relevant secondary causes e.g. review medications
Further tests as appropriate e.g. pregnancy test, urinalysis to check for proteinuria

TG 2.5 – 4.49

- Continue to treat any secondary causes
- Reinforce lifestyle advice
- Regular TG monitoring not required

TG 4.5 – 10

- Treat with a statin if at significant cardiovascular risk (based on usual criteria)
- If treatment is not started repeat TG in 1 month to confirm TG remain <10

TG >10

- Refer to secondary care
- Optimise any secondary causes
- Consider starting a fibrate if not contra-indicated

During treatment

- Repeat fasting lipid profile & ALT in 8 weeks
- No specific treatment target exists for TG at present
- In this group the main treatment aim is to transform a highly atherogenic lipid profile with moderately raised TG, high LDL and low HDL into a less atherogenic one
- If TG remain > 5 on statin treatment and the patient is at high cardiovascular risk we recommend specialist advice is obtained(preferably via e-mail)

† Secondary causes of raised TG

Alcohol excess	Hypothyroidism
Nephrotic syndrome/ renal disease	Immunoglobulin excess
Drugs (including thiazides, non-cardioselective beta blockers, oestrogens, tamoxifen, corticosteroids)	Bulimia
	Pregnancy
	Obesity Insulin resistance Diabetes Metabolic syndrome

* Lifestyle advice

Weight loss, if appropriate
Reduce or abstain from alcohol
Dietary modification: ▪ reduce total calorie intake by minimizing intake of fats and carbohydrate ▪ increase intake of fish, especially oily fish
Smoking cessation (smoking independently increases TG levels)
Increase physical activity

Seek specialist advice

- If TG >10
- TG 5–10 in a high cardiovascular risk patient not responding to statin treatment
- Suspected familial hyperlipidaemia
- Patients with significant hyperlipidaemia that is proving difficult to manage in primary care
- Refer urgently to secondary care those with TG >20 not caused by alcohol or poor glycaemic control

Clinic	Specialist advice contact details
Lipid Clinic, RIE	RIE.LipidClinicAdvice@luht.scot.nhs.uk
CVD risk clinic, WGH	WGH.CardiovascRiskAdvice@luht.scot.nhs.uk
Lipid clinic, SJH	Tel: 01506 523 841
Lothian lipid guidelines	here

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