Management of Hyperlipidaemia in Primary Care: Clinical Guidelines

Primary CVD Prevention
(including type 2 diabetes)

Excluding patients with type 1 diabetes, CKD, existing CVD or Familial hypercholesterolemia (see NICE CG 71)

Type 1 diabetes
Offer atorvastatin 20mg if age >40 **or** diabetes > 10 years **or** nephropathy **or** other CVD risk factors

Check full lipid profile (total cholesterol, HDL, non-HDL cholesterol and triglycerides)

CVD risk is over 10% (using QRISK 2)
(up to 84 Years old)
https://www.qrisk.org/2016/

Address modifiable risk factors: diet, alcohol, smoking, blood pressure, physical activity, BMI

Discuss statins therapy benefit/harm – use NICE patient decision aid to offer people information about their absolute risk of CVD

Offer atorvastatin 20 mg a day (See Box 2, 3 &4)
Measure full lipid profile at 3 months of treatment

>40% Reduction in non-HDL cholesterol achieved?

Yes

Annual review of medication and CVD risk factors (lipid profile, BP, smoking status)

No

Check for medication adherence and timing

Optimise adherence to diet and life style measures

Secondary CVD Prevention

(All patients with clinical evidence of vascular disease)

Offer atorvastatin 80 mg daily.
(See Box 2, 3, 4)

Consider atorvastatin 20 mg if:
- Potential drug interactions
- High risk of adverse effects
- Patient preference

Consider increasing the dose gradually if started on <80 mg a day and the person is judged to be at higher risk because of comorbidities or using clinical judgement

If atorvastatin is not tolerated, aim to treat with maximum tolerated dose, tell the person that any statin at any doses reduces CVD risk. Discuss trying the following strategies
- Stop the statin and try again once symptoms have resolved to check if symptoms are statin related.
- Change to an alternative statin within the same intensity group.
- Change to an alternative statin within a lower intensity group.

Consider seeking specialist advice about options for patients who are at high risk of CVD or who are intolerant to 3 different statins (see Box 1)
Only use ezetimibe in accordance with NICE TA 385

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Box 1: Consider referral to lipid clinic if:

- Total Cholesterol > 9 mmol/L or non-HDL Cholesterol > 7.5 mmol/L
- Familial Hypercholesterolemia or other genetic dyslipidaemia is suspected
- Fasting TG persistent > 10 mmol/L
- Urgent if fasting TG > 20 mmol/L (and not due to excess alcohol or poor diabetes control)
- Side effects or contraindications to statins
- Failure to achieve treatment aims

Box 2: Drugs safety:

- Statins interact with other medications. Please refer to the current BNF for up-to-date list
- Statins should be avoided in pregnancy (discontinue 3 months before attempting conceive) and in breast feeding
- Statins should be used with caution in patients at risk of myopathy or rhabdomyolysis
- Statins should be discontinue if ALT is > 3 times upper reference range
- Patients with hypothyroidism should receive adequate thyroxine replacement before starting them on statins

Box 3: Statins and creatinine kinase (CK)

- Before offering statin, ask the person if they have had persistent generalised unexplained muscle pain. If they have, measure CK level. If CK levels are more than 5 times the upper limit of normal (ULN), re-measure after 7 days. If CK is still 5 times ULN, **do not** start statin treatment. If CK levels are raised but less than 5 times ULN, start statin at a lower dose.
- Consider seeking specialist advice if patients develop muscle pain
- Do NOT measure CK levels in asymptomatic people who are being treated with a statin.

Box 4: Statins and liver transaminase (ALT/AST)

- Measure baseline ALT/AST before starting a statin, within 3 months of starting and at 12 months, but not again unless clinically indicated
- Do not routinely exclude people who have raised ALT/AST but are less than 3 times ULN from statin therapy

Box 5: Chronic Kidney Disease:

- eGFR >30 or albuminuria : Offer atorvastatin 20 mg a day. Seek specialist advice before increasing the dose
- eGFR < 30: Seek specialist advice before starting atorvastatin

Box 6: Grouping of statins:

- Atorvastatin 10 mg[2], 20 mg[3], 40 mg[3], 80 mg[3]
- Simvastatin 10 mg[1], 20 mg[2], 40 mg[2]
- Pravastatin 10 mg[1], 20 mg[1], 40 mg[1]
- Rosuvastatin 5 mg[2], 10 mg[3], 20 mg[3], 40 mg[3]

1. low intensity, 2. medium intensity, 3. high intensity

Following the MHRA report of increased risk of myopathy associated with 80 mg simvastatin. The use of simvastatin at this dose is not routinely recommended. Consider discussing individual cases with the specialists, if required.

Box 7: The following treatments are not recommended for routine use in the modification of CVD risk:

Fibrates, Nicotinic acid, Bile acid sequestrant or Omega 3 fatty acid compounds

Please note management of raised triglycerides sits outside of this guidance. See separate Hypertriglyceridaemia guidelines. Consider discussing individual cases with the specialists, if required.

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References:

1. NICE CG 181 (July 2014); Lipid Modification
2. NICE TA 385 (February 2016): Ezetimibe for treating primary and non familial hypercholesterolemia
3. NICE FAD April 2016; Alirocumab for treating primary and mixed dyslipidaemia
4. NICE FAD April 2016: Evolocumab for treating primary and mixed dyslipidaemia

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