Barnsley Severe Hyperlipidaemia Pathway

To be used in alongside the Barnsley Lipid Management Pathways for Primary and Secondary Prevention of CVD

SEVERE HYPERLIPIDAEMIA

If TC>7.5mmol/L and/or LDL-C>4.9mmol/L and/or non-HDL-C >5.9mmol/L, a personal and/or family history of confirmed CHD (<60 years) and with no secondary causes:

suspect familial hypercholesterolaemia (possible heterozygous FH)

Do not use QRISK risk assessment tool

For referrals to Sheffield, see Sheffield FH referral criteria (page 2)*

DIAGNOSIS AND REFERRAL

Take **fasting** blood for repeat lipid profile to measure LDL-C.

Use the **Simon Broome** or **Dutch Lipid Clinic Network** (DLCN) criteria to make a **clinical diagnosis of FH**.

Use clinical findings, a full lipid profile and family history to judge the likelihood of a familial lipid disorder, rather than using strict lipid cut-off values alone.

Refer to Lipid Clinic for further assessment if **clinical diagnosis of FH**
OR contact bdg-pharmacylipidclinic@nhs.net (for attention of Lead Pharmacist, Medicines Information and Cardiology, BHNFT) for advice and guidance;
if TC>9.0mmol/L and/or
LDL-C >6.5mmol/L and/or
non-HDL-C >7.5mmol/L or
Fasting triglycerides > 10mmol/L (regardless of family history)
(see page 4 Barnsley Lipid Management for Primary Prevention of CVD in adults)

TREATMENT TARGETS IN FH

If clinical diagnosis of FH and/or other risk factors present follow the recommended treatment management pathway for primary or secondary prevention as for non-FH (see relevant Barnsley Guideline), ***BUT***
Aim to achieve at least a 50% reduction of LDL-C (or non-fasting non-HDL-C) from baseline.

Consider specialist referral for further treatment and/or consideration of PCSK9i therapy (also see NICE eligibility criteria on page 2) IF

- they are assessed to be at very high risk of a coronary event**
- OR therapy is not tolerated
- OR LDL-C remains >5mmol/L (primary prevention)
- OR LDL-C remains >3.5mmol/L (secondary prevention)

despite maximal tolerated statin and ezetimibe therapy.

**defined as any of the following:

- Established coronary heart disease
- Two or more other CVD risk factors

*STH referral pathway for adult patients with query familial hypercholesterolaemia (FH): Lipid Problems Referral Pathway (sheffieldccgportal.co.uk)

PCSK9i NICE eligibility criteria

NICE eligibility criteria for PCSK9i and fasting LDL-C thresholds are summarised below:

NICE TA393 Alirocumab NICE TA394 Evolocumab	Without CVD	With CVD	
		High risk[1]	Very High Risk[2]
Primary heterozygous-FH	LDL-C > 5.0 mmoL/L	LDL-C > 3.5 mmoL/L	

[1] History of any of the following: ACS; coronary or other arterial revascularisation procedures; CHD, ischaemic stroke; PAD.

[2] Recurrent CV events or CV events in more than 1 vascular bed (that is, polyvascular disease).

PCSK9 inhibitors have a red classification on the Barnsley Formulary.

Abbreviations and Definitions

CHD: coronary heart disease
CVD: cardiovascular disease
FH: familial hypercholesterolaemia
LDL-C: low density lipoprotein cholesterol
non-HDL-C: non-high density lipoprotein cholesterol
PCSK9i: proprotein convertase subtilisin kexin 9 monoclonal antibody inhibitor
TC: total cholesterol

non-HDL-C = TC minus HDL-C

LDL-C = non-HDL-C minus (Fasting triglycerides[a]/2.2)

[a] valid only when fasting triglycerides are less than 4.5 mmol/L

Acknowledgements

This guidance has been adapted from the NHS Accelerated Access Collaborative Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD. NHS Accelerated Access Collaborative » Summary of national guidance for lipid management (england.nhs.uk)

Development Process

This guidance was endorsed by the Barnsley Area Prescribing Committee on 9th October 2024.
Updated in line with the updated AAC Summary of National Guidance for Lipid Management March 2024.