Statins And Liver Disease

Liver disease that is attributable to statin use is rare, and it is uncertain whether raised serum ALT represents true hepatotoxicity. Nonetheless, current guidance (NICE CG67) is that ALT should be monitored before starting therapy, at 3 months and again at 12 months. There is no need for further monitoring unless clinically indicated.

There is less definite guidance on how to react if this monitoring detects a raised ALT. The following strategy seems reasonable:

- If ALT is raised but less than 3 times the upper limit of normal, repeat ALT in 4-6 weeks. If the level remains stable, continue as normal.
- If ALT is greater than 3 times the upper limit of normal, reduce the statin dose and repeat ALT in 4-6 weeks. If ALT remains greater than 3 times the upper limit of normal, stop the statin and repeat ALT in 4-6 weeks. Abnormalities usually resolve quickly, and cautious re-introduction of statin or dosage increase can be considered.

Statins And Muscle Disease

There is a low risk of myopathy attributable to statin use. People are at higher risk of developing myopathy if they have underlying muscle disease, untreated hypothyroidism, kidney disease, excessive alcohol intake, if they are aged over 70 years, or if they are taking certain other medications (eg. fibrate). Current CSM advice is that patients at high risk of myopathy should have a baseline serum CK measured before starting statin therapy. If CK is greater than 5 times the upper limit of normal, do not start statin therapy.

For patients not at high risk of myopathy, current guidance (NICE CG67) is that CK should not be routinely monitored in asymptomatic people taking a statin. Patients should be advised to seek medical advice if they develop pain, weakness or tenderness of muscles. If this happens, serum CK should be measured.

There is less definite guidance on how to react if the CK is raised. The following strategy seems reasonable:

- If CK is raised but less than 5 times the upper limit of normal, repeat CK in 2 weeks. If the level remains stable and symptoms are tolerated, continue the statin and monitor CK perhaps 6-monthly. If muscle symptoms are severe or CK continues to rise, consider stopping the statin.
- If CK is greater than 5 times the upper limit of normal, CSM advice is to stop the statin. If CK returns to normal, consider cautiously re-starting the statin at low dose.
- If CK is greater than 5000 IU/L, stop the statin and assess the patient urgently as they are at risk of acute renal failure due to rhabdomyolysis. Correct any obvious fluid deficit, maintain good urine output, and closely monitor serum potassium and creatinine. It is likely that this would be best done by urgent referral to hospital.