

Unbundling of Liver Function Tests- ALT testing only in Statin Initiation and Monitoring- Guidance 2015

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A normal ALT is a sufficient 'screening test' to exclude serious liver disease before starting a statin.

Aim:

This document summarises all of the evidence and recommendations so far which have been collated to highlight the cost savings of ALT (alanine aminotransferase) testing only when monitoring statins (rather than the full array of liver function tests). It may also be of patient benefit to avoid additional tests unless clinical presentation or past medical history indicates the full array of Liver Function Tests (LFTs). This was one of the top recommendations from the Liver Disease Stakeholders Meeting which took place in July 2014.

Evidence for Recommendations:

1. NICE guidance

ALT only testing is about to become NICE guidance

<http://www.nice.org.uk/guidance/cg181/resources/lipid-modification-update-draft-nice-guideline2>

Excerpt below from Lipid Modification Update Draft Nice Guideline – February 2014

'1.3.42 Measure baseline liver transaminase enzymes (alanine aminotransferase or aspartate aminotransferase) before starting a statin. Measure liver transaminase (alanine aminotransferase or aspartate aminotransferase) within 3 months of starting treatment and at 12 months, but not again unless clinically indicated. [2008, amended 2014]

1.3.43 Do not routinely exclude from statin therapy people who have liver transaminases levels that are raised but are less than 3 times the upper limit of normal. [2008]'

2. Bradford LFT Statin Guidance

It is important to recognise that ALT may rise after commencing statin therapy.

http://www.pathology.leedsth.nhs.uk/pathology/Portals/0/Policies/ClinBiochem/Bradford_LFT_Statin_Guidance.pdf

Excerpt below from Bradford LFT Statin Guidance:

'STATINS ARE CONSIDERED SAFE IN CHRONIC LIVER DISEASE AND IN NAFLD MAY BE OF NET PATIENT BENEFIT AND SHOULD NOT BE STOPPED UNLESS THERE IS A RISE IN ALT >3X ULN AFTER STATIN USE'

3. CEG Statin Guidance

The CEG statin guidance has been agreed by prescribing advisors and GP leads across East London and developed with the help of Professor Graham Foster, Hepatology Consultant at Bart's and The London NHS Trust

It contains a major change in advice on liver function tests. The CEG have released a statin update to request one ALT if monitoring for statins and not full LFTs.

http://blizard.qmul.ac.uk/ceg-resource-library/clinical-guidance/doc_view/270-statin-and-lipid-modification-march-2013.html

Excerpt below from the CEG Guidance:

Statins do not cause liver disease. They are often associated with mild increases in liver transaminases and unusually in >3 fold rises which are often transient.

- Test liver transaminase ALT before starting statin therapy to identify pre-existing disease.
- If this baseline tests is normal and there is no previous history of liver disease, no further monitoring of liver function tests is required unless clinically indicated.
- If ALT is raised take a careful history including use of alcohol/drugs/medication/ transfusion pre 1991 /treatment or birth abroad, perform clinical examination and further testing (e.g. platelets, full LFTs, viral hepatitis screen).
- In patients with raised transaminases in whom fatty liver disease is thought to be the cause, only patients with an ALT>100 or an AST:ALT ratio of >1 or a platelet count of less than 100 x10⁹/L (normal 150---450 10⁹/L) are at high risk of liver disease progression. Such patients should be referred for consideration of a liver biopsy
- Raised transaminases should not preclude appropriate statin use, though LFTs should be monitored.

Cost Implications:

In the USA \$10billion dollars is spent annually on LFT testing in people on statins. No doubt these costs are likely to be similar pro rata in the UK.

However a full array of LFTs should remain an option where clinically indicated.

At present LFTs are ordered as a block of 6 metrics ALT, AST, bilirubin, ALP, total protein and γ GT.

Our local advice is that it is sufficient to use a single ALT before commencing a statin and not again unless clinically indicated.

Summary:

It is therefore recommend with the evidence above that:

A single ALT is available for routine assessment when commencing statins .