Liver Function Testing Pathway

GP information sheet

February 2013









Changes to the Liver function testing profile

There will be a change in the panel of tests you will receive when LFTs are requested. This is in light of recent advances in, and rising incidence of Non Alcoholic Fatty Liver Disease (NAFLD) which is an increasing cause of liver fibrosis which can lead to cirrhosis. The challenge is to identify those at high risk who need referral, against those who can safely be monitored in primary care.

These changes are:

- Gamma GT has been dropped from the routine panel of LFT but will be automatically requested by the laboratory if a GGT has not been checked within the last month and the ALP is above the reference range.
- AST will be automatically requested by the laboratory if the ALT result is outside the reference range if the AST has not been measured in the last three months.
- Any sample with a raised ALT will have an AST/ALT ratio result automatically added. AST/ALT ratio will be recalculated only at 3 month intervals
- GGT can still be requested as a separate test if required
- AST can also be requested as a separate test if required
- The pathway applies to adult patients only

Reason for implementation:

Gamma GT is poorly predictive of liver disease. Its only utility is in:

- monitoring liver damage known to be due to alcohol when it will fall with a drop in consumption
- confirming that an isolated (i.e. normal ALT and bilirubin) raised alkaline phosphatase is of liver rather than bone origin. There is no longer a need to request Alkaline phosphatase isoenzymes for this purpose.

AST:ALT Ratio

- The AST/ALT ratio is a better guide for liver disease as an AST/ALT ratio of o.8o or more may indicate significant liver fibrosis.
- This allows you to manage patients with abnormal liver enzymes with confidence that they are unlikely to have significant liver fibrosis and refer only patients with a high risk of disease.
- Please see the attached document below for the new Nottinghamshire guidelines on the investigation of abnormal LFTs.
- The following comment will be added to your reports:

An AST/ALT ratio of o.8 or more may indicate significant liver fibrosis. Consider risk factors for liver disease such as obesity, diabetes, alcohol excess and viral hepatitis. See the Nottinghamshire guidelines for the investigation of asymptomatic abnormal liver enzymes for further investigation and management.

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