## Abnormal Liver Function Test (LFT) Results

<table>
<thead>
<tr>
<th>Developed by</th>
<th>American Gastroenterological Association (AGA) and the American Society for the Study of Liver Disease (ASSLD)</th>
</tr>
</thead>
</table>
| **How developed** | A consensus panel was convened by the two organizations. Literature was reviewed (see below) and recommendations were established.  
- Freidman LS. Approach to the patient with abnormal liver biochemical and function tests. Up to Date; November 12, 2013.  
| **Additional essential patient information** |  
- Clinical history of liver disease  
- Duration of abnormal LFTs  
- Prior history of hepatitis or liver disease?  
- Does the patient have associated abdominal pain?  
- Does the patient engage in high-risk behavior? (e.g. alcohol abuse, multiple sexual partners, IV drug use, etc.)  
- List any new medications or supplements?  
- Laboratory studies  
- CBC including platelet count  
- Complete metabolic profile (electrolytes, renal function, AST, ALT, Alkaline Phosphatase, Bilirubin)  
- Protime/INR |
# Abnormal Liver Function Test (LFT) Results (continued)

| Additional patient information, if available | • Clinical history  
|                                             |   • Has the patient previously been vaccinated for Hepatitis A? {yes/no}  
|                                             |   • Has the patient previously been vaccinated for Hepatitis B? {yes/no}  
|                                             |   • Has the patient previously been treated for Hepatitis B or C? {yes/no}  
|                                             |   • If yes, which medications and when  
|                                             | • Laboratory Tests  
|                                             |   • Acetaminophen level  
|                                             |   • ANA  
|                                             |   • AMA  
|                                             |   • Anti-smooth muscle antibody  
|                                             |   • Alpha Feto Protein (AFP)  
|                                             |   • Alpha-1 antitrypsin  
|                                             |   • Ceruloplasmin  
|                                             |   • Hepatitis A serologies (HAV total, IgG Ab, or IgM)  
|                                             |   • Hepatitis B serologies (HBsAg, HBsAb, HB core IgM)  
|                                             |   • Hepatitis C antibody  
|                                             |   • Hepatitis C RNA Viral Load  
|                                             |   • Hepatitis C genotype  
|                                             |   • Iron and TIBC  
|                                             |   • Ferritin  
|                                             |   • Liver/kidney microsomal antibodies  
|                                             |   • TIBC  
|                                             |   • HIV  
|                                             |   • Toxicology screen  
|                                             |   • TSH  
|                                             |   • Quantitative immunoglobulins  
|                                             | • Paracentesis results  
|                                             | • Imaging studies  
|                                             |   • RUQ Ultrasound with dopplers  
|                                             |   • Abdominal CT  
|                                             |   • Abdominal MRI  
|                                             |   • Liver Elastography  
|                                             |   • Nuclear scan  
|                                             |   • Endoscopic examination  
|                                             | • EGD  
|                                             | • ERCP  
| Alarm symptoms | A patient with encephalopathy, gastrointestinal bleeding, coagulopathy or worsening ascites with pulmonary compromise should be referred for urgent evaluation.  
| Tests/procedures to avoid prior to consult | None provided  
| Common rule-outs to consider prior to consults | None provided  
| Relevant “Choosing Wisely” elements | None provided  

**HVC Pertinent Data Sets** [http://hvc.acponline.org/physres_data_sets.html](http://hvc.acponline.org/physres_data_sets.html)  
©2014 American College of Physicians [www.acponline.org](http://www.acponline.org). All rights reserved.
## Abnormal Liver Function Test (LFT) Results (continued)

<table>
<thead>
<tr>
<th>Healthcare professional and/or patient resources</th>
<th>Healthcare Professional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.bcguidelines.ca/pdf/liver.pdf">http://www.bcguidelines.ca/pdf/liver.pdf</a></td>
</tr>
<tr>
<td>Patient Information</td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.patient.co.uk/health/liver-function-tests">http://www.patient.co.uk/health/liver-function-tests</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.medicinenet.com/liver_blood_tests/article.htm">http://www.medicinenet.com/liver_blood_tests/article.htm</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.webmd.com/a-to-z-guides/liver-function-test-lft">http://www.webmd.com/a-to-z-guides/liver-function-test-lft</a></td>
</tr>
</tbody>
</table>