

Evidence Discussion – Isolated or Incidental Hepatomegaly (AB-29.4)

Hepatomegaly (enlarged liver) can be detected by physical exam and imaging studies, such as ultrasound, CT, MRI and nuclear medicine studies. An enlarged or palpable liver does not always indicate primary liver disease, so advanced imaging should be directed by history, other physical findings and laboratory results.

An enlarged liver can be caused by

- Primary liver disease (hepatitis, alcoholic liver disease, NAFLD (non-alcoholic fatty liver disease), other causes of liver inflammation)
- Metastatic or primary liver tumors
- Infiltrative disease (such as amyloidosis, infiltrative lymphoma)
- Impaired venous outflow (such as right heart failure, Budd-Chiari syndrome)
- Storage disorders (such as Gaucher Disease, Alpha-1 antitrypsin deficiency)
- Polycystic liver disease
- Other less common causes

Initial imaging studies should be chosen based on history, physical exam, laboratory studies and prior imaging studies. Usually, ultrasound of the abdomen and/or duplex scan would be the initial tests. Advanced imaging, such as CT or MRI are likely to be indicated based on findings based on specific guidelines based on the abnormality detected on ultrasound.

References

1. Lalani T, Rosen MP, Blake MA, Baker ME, et al. Expert Panel on Gastrointestinal Imaging. ACR Appropriateness Criteria® liver lesion -- initial characterization. American College of Radiology (ACR), 2014.
2. Chalasani N, Younossi Z, Lavine JE, et al. The diagnosis and management of nonalcoholic fatty liver disease: Practice guidance from the American Association for the Study of Liver Diseases. *Hepatology*. 2017;67(1):328-357. doi:10.1002/hep.29367.
3. Singal, Amit. Approach to Liver Lesions: Abnormal Sonogram, Please Evaluate. Medical Director, Liver Tumor Program, UT Southwestern Medical College. Presentation at 2019 American College of Gastroenterology Hepatology School and Eastern Regional Postgraduate Course. Washington, DC, June 7-9, 2019
4. American College of Radiology ACR Appropriateness Criteria® Liver Lesion- Initial Characterization Revised 2020. <https://acsearch.acr.org/docs/69472/Narrative/>.