

Evidence Discussion: Right Upper Quadrant Pain Including Suspected Gallbladder Disease (AB-2.3)

- When red flags suggesting serious underlying pathology exist in patients with right upper quadrant abdominal pain, early use of advanced imaging is warranted.
- Right upper quadrant abdominal (RUQ) pain is most commonly associated with disease of the gallbladder and hepatobiliary system. Ultrasound is the initial imaging study for RUQ pain due to its availability, lack of exposure to ionizing radiation, and utility in diagnosis. Use of ultrasound can not only confirm the diagnosis of biliary disease but if inconclusive, it can often identify the next most appropriate study and contrast level needed for evaluation (MRCP/ERCP for dilated biliary ducts, CT for pancreatitis, MRI/CT with and without contrast for a liver or kidney mass, etc.).
- Hepatobiliary System Imaging (HIDA) is useful for suspected biliary disease if US is inconclusive. HIDA scanning is also useful for many hepatobiliary specific disease processes such as bile leaks and choledochal cyst.

References:

1. Cartwright S, Knudsen M. Evaluation of acute abdominal pain in adults. *Am Fam Physician*. 2008 Apr 1;77(7):971-978.
2. Yarmish GM, Smith MP, Rosen MP, et al. Expert Panel on Gastrointestinal Imaging. ACR Appropriateness Criteria® right upper quadrant pain. *J Am Coll Radiol*. 2014;11(3):316–32.
3. Jang T, Chauhan V, Cundiff C, Kaji AH. Assessment of emergency physician–performed ultrasound in evaluating nonspecific abdominal pain. *The American Journal of Emergency Medicine*. 2014;32(5):457- 460. doi:10.1016/j.ajem.2014.01.004.
4. Gans SL, Pols MA, Stoker J, Boermeester MA. Guideline for the Diagnostic Pathway in Patients with Acute Abdominal Pain. *Digestive Surgery*. 2015;32(1):23-31. doi:10.1159/000371583.
5. Lameris W, Randen AV, Es HWV, et al. Imaging strategies for detection of urgent conditions in patients with acute abdominal pain: diagnostic accuracy study. *Bmj*. 2009;338. doi:10.1136/bmj.b2431.
6. Longo SA, Moore RC, Canzoneri BJ, Robichaux A. Gastrointestinal conditions during pregnancy. *Clin. Colon Rectal Surg*. 2010; 23(2):80-89. doi:10.1055/s-0030-1254294. 20. Guidelines for diagnostic imaging during pregnancy and lactation. Committee Opinion No. 723. *Obstet Gynecol*. 2017;130:e210–6.
7. Aslanian HR, Lee JH, Canto MI. AGA clinical practice update on pancreas cancer screening in high risk individuals: expert review. *Gastroenterology*. 2020;159(1):358-362. doi:10.1053/j.gastro.2020.03.088.29.
8. National Institute for Health and Care Excellence (NICE). Upper gastrointestinal tract cancers. In: Suspected cancer: recognition and referral. 2015. <https://www.nice.org.uk/guidance/ng12/chapter/Recommendations-organised-by-site-of-cancer#uppergastrointestinal-tract-c>