

10 MinuteMoment

PHYSICAL EXAM FOR JAUNDICE



Faculty development

The key starting point for the initial assessment of jaundice is to recognize the 3 main etiologies: **hemolytic** (due to increased bilirubin from RBC breakdown), **hepato-cellular** (due to liver parenchyma injury) and **obstructive** (due to any obstruction of the biliary ducts). The physical exam helps determine the source.

SPIDER ANGIOMAS are a sign of liver disease and often found on the face, neck, shoulder or upper extremities. If present, the Likelihood Ratio (LR) = 4.5 for cirrhosis.

PALMAR ERYTHEMA, identified by symmetrical reddening of the palm, will be most pronounced on the thenar and hypothenar eminence. If present, the LR = 4.3 for cirrhosis.

ASTERIXIS is the inability to maintain a fixed posture of the hands or other areas, such as the tongue. If present, the LR = 8.8 for cirrhosis.

ELEVATED PORTAL VENOUS PRESSURE (portal hypertension) leads to increased blood flow in the umbilical and peri-umbilical veins, clinical seen as *caput medusa*.

SPLENOMEGALY in a jaundiced patient increases the probability of hepato-cellular disease (due to portal hypertension). Since the spleen enlarges inferiorly and antero-medially, start palpation for the spleen in the right lower quadrant.

ABDOMINAL DISTENTION increased the probability of ascites *if* a fluid wave is present (LR = 5) or *if* edema is present (LR = 3.8).

COURVOISIER'S SIGN, which is the present of a smooth, non-tender, and distended gall bladder, is a sign of obstructive jaundice. If present, the LR = 26 for obstruction.

This patient with a history of alcohol abuse presents with JAUNDICE. Please examine them to determine the etiology of the jaundice.

	PHYSICAL EXAM TECHNIQUE	Y / N	AREAS FOR FEEDBACK
INSPECTION	Observe the patient for extra-abdominal finding of Jaundice * Did the learner evaluate for spider teleangiectasias? * Did the learner evaluate the patient's hands for palmar erythema? * Did the learner evaluate for asterixis? * Did the learner observe for engorgement of the abdominal veins?		- Learner does not expose the patient's abdomen. - Learner does not know where to look for spider angiomas. - Learner does not recognize palmar erythema. - Learner does not look for loss of body hair - Learner does not palpate for gynecomastia.
	Palpate the liver * Did the learner assess for hepatomegaly or a firm liver edge? Palpate the spleen * Did the learner know to assess for splenomegaly starting in the RLQ? Palpate the gallbladder * Did the learner know how to assess for Courvoisier sign? Assess for ascites * Did the learner use a technique of shifting dullness or a fluid waver? Assess for ankle edema		- Learner does not have the correct technique to palpate for the liver - Learner does not have the correct technique to evaluate the spleen. - Learner does not look for painless, enlarged gallbladder. - Learner did not perform the right technique to assess for ascites. - Learner did not evaluate for ankle edema
	Did the learner have an organized and structured approach to the exam?		
	Did the learner maintain the patient's comfort and well being?		