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Clinical Test Reference Guide

Gallbladder Dysfunction (Cholecystitis) (King, et al., 2018, p. 825) and (PubMed, 2007)	Second to appendicitis, cholecystitis is the most common etiology of acute abdomen in pregnancy. Cholecystitis is an inflammation of the gallbladder caused by obstruction of the cystic duct. A gallstone usually causes the obstruction (calculus cholecystitis). However, in some cases, the obstruction may be acalculous or caused by sludge. Raised levels of estrogen in pregnancy contribute to this build up and this process combines with the decreased emptying rate in pregnancy to lead to stone formation and stasis.
Questions/observations or vitals used to differentially rule out a suspected condition (Celaj & Kourkoumpetis, 2021)	Clients with Cholecystitis may present with acute epigastric pain or pain exacerbated by a fatty meal, or continuous and severe pain. Other common symptoms include: <ul style="list-style-type: none">● Pain in the right upper quadrant, radiating to the right scapula● Flank pain● Anorexia● Nausea/vomiting● Low-grade fever● Tachycardia● Light colored stools● Dark urine● Jaundice● Intolerance of fatty foods
Name of lab or Test(s) available to screen/detect condition and under which conditions to you run which test (if several are available)	<ul style="list-style-type: none">● CMP to assess for elevated Leukocytosis, AST/ALT/ALP, and bilirubin● Urinalysis should be used to rule out

(King, et al., 2018, p. 825)	<p>pyelonephritis and renal calculi</p> <ul style="list-style-type: none"> • CBC to assess platelets • Ultrasound to evaluate for the presence of gallstones/inflammation
Timing of the tests- when performed	Upon symptoms presenting.
Reliability of the test	N/A
Requirements of the test (if any, if you will be doing it yourself)	Labwork can be performed in-house and a US will need a referral for a radiologist, I would even consider MFM.
Cheat sheet for test results or ranges of normal findings (Frye & Baker, 2007)	<ul style="list-style-type: none"> • Bilirubin, Total: This indicates the severity of jaundice when present. (0.2-1.2 mg/dL) • Alkaline Phosphatase: Elevated levels can be indicative of liver disease, cholestasis, and hyperthyroidism. Decreased values can be indicative of hypothyroidism or malnutrition (protein deficiency and/or magnesium deficiency). (31-125 U/L) • AST: Assesses for inflammation, injury, liver function, or necrosis of the tissues. Elevated levels could be indicative of hepatitis, hemochromatosis, myocardial infarction, pulmonary infarction, renal infarction, or cerebral necrosis. (10-30 U/L) • ALT: ALT is designed to detect damage to liver cells. Elevated levels can be an indicator of acute or chronic hepatitis, hemolytic anemia, etc. (6-29 U/L) • Platelet Count: Assesses the ability to produce platelets and the destruction or loss of platelets in circulation. Elevated levels can be indicative of iron deficiency anemia, renal disease, or infection/inflammation. Decreased values can be indicative of aplastic

	anemia, liver disease, and thrombocytopenia (40 - 400 thousand/uL)
Follow-up testing schedule (if applicable)	Labwork is required routinely after a diagnosis to assess the severity of the condition.
Scope of Care Considerations (Celaj & Kourkoumpetis, 2021)	This condition is surgically treated in many cases, but that is not without risk during pregnancy. Endoscopic retrograde cholangiopancreatography (ERCP) can be performed to retrieve gallstones and alleviate duct obstruction, delaying the need for surgery, but also has risks. Nonsurgical support like medications can help postpone symptom progression in some individuals, but many end up needing surgery. Those with cholecystitis who do not undergo cholecystectomy are at a higher risk of adverse outcomes such as preterm delivery, longer hospital stay, and being readmitted to the hospital. Recurring biliary colic symptoms in pregnant women can be more severe than the initial episodes. Clients diagnosed with Cholecystitis should be transferred to a higher level of care for more routine monitoring by an OBGYN.

References

- Celaj, S., & Kourkoumpetis, T. (2021). Gallstones in pregnancy. *JAMA*, 325(23), 2410.
<https://doi.org/10.1001/jama.2021.4502>
- Frye, A., & Baker, R. (2007). *Understanding Diagnostic Tests in the Childbearing Year: A Holistic Approach* (7th ed.). Labrys Pr.
- King, T. L., Brucker, M. C., Osborne, K., & Jevitt, C. M. (2018). *Varney's Midwifery* (6th ed.). Jones & Bartlett Learning.
- PubMed. (2007). *Cholecystitis during pregnancy. A case report and brief review of the literature*.
<https://pubmed.ncbi.nlm.nih.gov/18225691/>