

Amoxicillin-Clavulanate related Liver Injury

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Introduction: Recognition of Drug-induced Liver Injury (DILI) may be challenging as it is often diagnosis of exclusion, unavailability of diagnostic test and variability in presentation. Many antibiotics can cause DILI but Amoxicillin-Clavulanate has rare adverse reaction causing mixed cholestatic-hepatocellular injury. Since amoxicillin alone does not induce liver injury, combination of amoxicillin and clavulanic acid could be responsible for this adverse reaction. It can be due to metabolic idiosyncrasy or hypersensitivity mechanism.

Case Report: 64-year-old female with no pertinent PMH presented to ER with abdominal pain and jaundice. She had abdominal pain for 4-5 days. Abdominal pain was constant and located at right upper quadrant and epigastric region. She had associated complaint of nausea, vomiting, metallic taste and chills. Patient had been avoiding eating in fear of vomiting. She also had pale colored stool. Patient did not have any history of gall stones, hepatitis or alcohol use. On further inquiry, she reported being on Amoxicillin-Clavulanate for 4 days, for dental abscess, before onset of symptoms. She stopped taking antibiotic as soon as she started having above-mentioned symptoms. Patient was not on any other new medications during this time-period. On initial evaluation, patient was found to have elevated liver enzymes with T.bilirubin 6.4, AST 218, ALT 288, ALP 331. Due to broad differentials associated with elevated liver enzymes with abdominal pain, further workup was done. Abdominal CT scan and MRCP results were unremarkable. Hepatitis panel was also negative. Patient was provided with supportive care and hydration with IV fluids. Repeat labs done on 4th day since admission showed down trending LFTs – T.bilirubin 3.8, AST 152, ALT 141, ALP 253.

Discussion: Amoxicillin-Clavulanate can cause hepatocellular, cholestasis or mix type of liver injuries depending upon genetic factors or pre-existing liver conditions. Early recognition and removal of offending medication is the initial mainstay of treatment along with supportive care. This case signifies proper history taking and review of medications could avoid unnecessary and expensive diagnostic tests for diagnosis. Our case emphasizes importance of early recognition of this reversible condition due to Amoxicillin-Clavulanate or other medications to prevent worsening of liver failure and its complication.

References :

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