



BMH Med. J. 2017;4(1):41-43 **Case Report**

A Case of Cholestatic Hepatitis

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Abstract

Cloxacillin, a commonly prescribed antibiotic for MSSA, can rarely cause cholestatic hepatitis. Case fatalities have also been reported. Liver injury can be delayed upto several weeks after stopping the drug, thus causing difficulty in making the diagnosis and also an array of unnecessary investigations. Hence a high index of suspicion is required. We are presenting a case of cloxacillin induced cholestatic hepatitis which occurred in a young male after 4 weeks of taking the drug and persisted for 5 weeks.

Keywords: cholestatic hepatitis, Cloxacillin

Introduction

Cloxacillin is a penicillinase resistant semisynthetic penicillin used for the treatment of methicillin sensitive Staphylococcus infections. There were case reports from Australia, Netherlands and Scandinavia of cholestatic liver injury of unknown cause in cloxacillin users (1-4). Subsequently the clinical picture was better delineated with clinical case series. There occurs a prolonged painless jaundice and pruritus with elevation in liver enzymes, 2 to 6 weeks after cloxacillin use.

We present a case of cloxacillin induced hepatitis four weeks after consumption of the drug.

Case report

Middle aged person presented with generalised pruritus of five days duration and two days of yellowish discolouration of urine. There was no fever, anorexia, nausea, or vomiting. There were no significant past illnesses. Not on any long term medication. No family history of jaundice. No sexual promiscuity or IV drug abuse. Never consumed alcohol. On examination there was jaundice and generalised excoriation marks. No signs of chronic liver disease. No hepatomegaly or splenomegaly.

A provisional diagnosis of viral hepatitis was made and baseline investigations showed elevated liver enzymes and bilirubin. There was no relief of pruritus with UDCA. All the viral markers came out negative. Repeated liver function tests showed reduction in SGPT, but the ALP and bilirubin remained high. As the viral markers were negative a USG of the abdomen was done which showed

Normal liver except for a diffuse increase in echo texture.

Meanwhile due to the intractable pruritus, cholestyramine was given, following which there was some relief.

As the cause of the predominantly cholestatic form of jaundice was not found, the history was retaken. Old documents showed history of cloxacillin intake for a minor wound infection one month before the onset of pruritus. Cloxacillin was taken for ten days at a dose of 500 mg four times a day.

Hence the diagnosis of cloxacillin induced hepatitis was made and was kept under observation. Further tests were deferred. There was gradual improvement and became totally asymptomatic over a period of five weeks.

Discussion

Cholestatic hepatitis as a side effect of cloxacillin is well described, though rare [1-5]. The risk is estimated to be about 7 per 100,000 users [6], reported mostly in the first six weeks of drug intake [7]. Fatal reactions are rarely reported [2,4,5]. Prolonged use of cloxacillin (more than two weeks) and increasing age (more than 55 years) are the major risk factors [1]. Illness usually presents as jaundice and pruritus which are severe and protracted [1]. Diagnosis of drug induced liver injury (DILI) can be difficult because of the delay in presentation and the concomitant presence of other risk factors like alcoholism and non alcoholic fatty liver disease (NAFLD). The cause of cholestatic hepatitis can be attributed to the culprit drug if there is a prior exposure (latent period may vary) and after exclusion of other possible causes [8]. Injury may improve after stopping the drug and recur more rapidly with worsened severity on further exposure [9].

Histopathology shows centrilobular bile stasis with portal tract inflammation and variable loss of bile ducts [1,4,17]. It may also resemble autoimmune hepatitis [10]. A genome-wide association study using more than 8 lakh markers found HLA-B*57:01 to be the main common genetic risk factor [11]. A delay in the onset of symptoms and identification of human leukocyte antigen (HLA)-B*57:01 as a susceptibility factor are indicative of an immune pathogenesis, with largely T cell involvement. [12,13].

Other drugs which can cause similar picture are amoxicillin-clavulanate, captopril, carbamazepine, chlorpromazine, efavirenz, ezetimibe, estradiol, flutamide, diclofenac, erythromycin estolate, nafcillin, ketoconazole, nevirapine, rifampin, rosiglitazone, trimethoprim-sulfamethoxazole, troglitazone, and amiodarone [14,15,16].

Cloxacillin is the drug of choice for methicillin sensitive staphylococcus aureus. This case is reported to create awareness of such possible complications.

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