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Acute hepatitis with observed increased blood phenytoin level: a case study

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ABSTRACT

Acute hepatitis is a common problem in medical practice. This problem can be fatal if there is no proper management. For management, the investigation for the cause is necessary. In the case report, the authors present an interesting male case presenting with unexplained acute hepatitis. The routine laboratory investigation cannot reveal the cause of hepatitis. The additional toxicological drug test can reveal the unexplained increased level of phenytoin.

1. Introduction

Liver disease is an important group of medical disorder. Acute hepatitis is a common problem in medical practice. This problem can be fatal if there is no proper management. For management, the investigation for the cause is necessary[1].

In the case report, the authors present an interesting male case presenting with unexplained acute hepatitis. The routine laboratory investigation cannot reveal the cause of hepatitis. The additional toxicological drug test can reveal the unexplained increased level of phenytoin.

2. Case report

This case is a male, 35 years old, patient presenting with the feeling of malaise and right abdominal pain for 1 week and request for routine check-up. The patient did not drink alcoholic beverage and smoke.

The routine check-up as well as blood test was done and the interesting observation was the increased SGOT (125 U/

L) and SGPT (130 U/L) level indicating the hepatitis. In this case, further investigation for the cause of acute hepatitis was done including hepatitis A, hepatitis B, hepatitis C, GGT and acetaminophen profiles.

All mentioned test results were within normal limit. Next, the physician in charge further investigate by additional toxicological drug test and the increase blood phenytoin level could be observed.

This patient denied the history of using any drug, food supplementation and herb during the present illness and also had no personnel illness.

3. Discussion

Acute hepatitis is usually an abnormal hepatic disease. In tropical world, the problem of increase liver enzymes, SGOT and SGPT is common and usually due to some specific reasons. The two most common causes are hepatitis virus infection and alcoholic induced disorder.

Some cases can also be due to the use of over-the-counter drugs, especially for acetaminophen[2]. As noted, to properly manage the patient with hepatitis, it is required to know the exact etiology. The complete laboratory test should be done[3]. In the present case, such tests were done and all were negative. So, what the problem is?

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Here, the authors add further additional toxicological drug test for assessment. In fact, receiving of toxin can be the uncommon cause of hepatitis. In the present case, the unexplained finding of blood phenytoin level can be seen.

In fact, the patient had no history of contact to this drug and phenytoin is not the common over-the-counter drug. The possible explanation might be the contamination. Of interest, in the developed country as USA, the contamination of phenytoin in drinking water can be seen^[4] and it is no doubt that the similar situation might exist in developing country as in our situation.

Here, a case of acute hepatitis with unexplained increased level of phenytoin level was presented and discussed.

Conflict of interest statement

We declare that we have no conflict of interest

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