Acute Hepatitis Induced Pancreatitis; Uncommon Etiology of A Common Disease

Munmun Das (sarkar)1 Subhadip Basak, Tapabrata Das2, Sabyasachi Roy2, Amlan Kanti Biswas3, Raja Bhattacharya4

1 Assistant Professor, Department of Medicine, Medical college Kolkata, 88 college street, Kolkata-700073, West Bengal, India
2 Post Graduate Trainee, Department of Medicine, Medical college Kolkata, 88 college streetKolkata-700073, West Bengal, India
3 RMO and clinical tutor, Department of Medicine, Medical college Kolkata,
4 Associate professor, Department of Microbiology, Calcutta National Medical College, Kolkata.

Corresponding Author: Raja Bhattacharya.

I. Introduction

Acute pancreatitis is a life threatening condition. Biliary lithiasis and alcoholism are responsible for 70-80% of the cases. Several viral infections like Mumps, Coxsackie B , EBV & measles have been implicated as etiological factors as they cause oedema of Ampulla of Vater and ducts, mechanically obstructing the flow of pancreatic fluid & direct cell injury of pancreatic acini, leads to leakage of intracellular enzymes (1,2). But an association between viral hepatitis and acute pancreatitis is uncommon, mostly recorded in adolescents (3).

II. Materials And Methods

A 15 year old female was admitted with complains of fever for 7 days followed by yellowish discolouration of eyes & urine, with passage of clay colored stool & generalised itching for 15 days. History was not suggestive of autoimmune disorders, TB, with no significant drug /allergy, transfusion history.

She was anaemic, icteric and developed diffuse abdominal pain involving the right hypochondrium and epigastrium, alongside tender hepatomegaly, whereas Spleen was not palpable throughout course of stay, with no evidence of ascites and generalised lymphadenopathy.

IgM anti HAV-Reactive (1.68; Reference: >0.8, Positive)

Whereas IgM anti HEV, HIV, HbsAg and Anti HCV tests were Non Reactive

CBC showed neutrophilic leucocytosis amylase lipase was respectively 893 and 642.

UrineRE/ME normal study

USG-whole abdomen showed hepatomegaly with normal echotexture

MRCP -Hepato-splenomegaly with cholecystitis, CBD – normal in calibre, no intra-luminal lesion, mild ascites, pancreas is bulky – suggestive of acute pancreatitis.

CTE abdomen

Hepato-splenomegaly with mild diffuse pancreatic enlargement. CT severity Index-5

Hence she was diagnosed as a case of acute pancreatitis due to acute hepatitisA infection.

A similar scenario of a 16 year old boy was encountered in which he had fever for about 1 week, left upper quadrant pain, and icterus. He was suspected as a case of acute pancreatitis but the etiology remained unknown, hence thorough workup was done which revealed that he was Hepatitis A IgM positive. LFT showed transaminitis and increased amylase and lipase >800 and >600 respectively.

CECT WHOLE ABDOMEN: showed bulky pancreas and peripancreatic collection, suggestive of pancreatitis. The patient was managed conservatively and responded well.

III. Discussion

The mechanism of pancreatic damage by viruses is unknown. The cytopathic effect may be direct or it may be mediated through the patients immune response. It has been also suggested that viral infections cause edema of ampulla of vater and pancreatic ducts leading to pancreatitis as a result of obstruction to the flow of pancreatic fluid.
IV. Conclusion

Acute non fulminant viral hepatitis is usually a benign disease which gets resolved with time and the patient recovers completely in almost all cases. But when it is complicated with pancreatitis, the disease course becomes variable and the patients who are in pediatric and geriatric age group may suffer for longer duration which increases the morbidity and even moreality. Hence although very few cases of acute hepatitis A are complicated with pancreatitis, but in case of unknown etiology of pancreatitis with the background of transaminitis and jaundice of short duration, a diagnosis of acute viral hepatitis induced pancreatitis should be excluded.

References

