Coma in Enteric Fever

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Enteric fever continues to occur with considerable frequency in developing countries and is still a major health problem in Pakistan[1]. The classical picture, however, is not as frequent now as was noted previously[2]. We report a case of cnteric fever who presented in an unconscious state with the clinical picture of acute fulminant hepatic failure.

Case Report

A 19 year old female, 32 weeks pregnant, presented with a weeks history of remittent high grade fever, jaundice for 15 days and gradual loss of consciousness over a period of 4 days. On admission, she was. unconscious (coma grade 3) mildly jaundiced, had peripheral oedema and ascites and bleeding from skin and mucous membranes. There was no hepatosplenomegaly or lymphadenopathy. She was febrile (Tern— perature 99.2 F) and had a pulse rate of 100/minute. There was no history of intake of drugs orblood transfusion in the past. Her initial investigations showed a haemoglobin of 10.4 g/dl, total leucocyte count of 7650/cmm with 76% neutrophils, bilirubin of 45 mmol!L, ALT 293 i.u., platelet count 130,000/cmm, prothrombin time of 27 seconds (control 13), activated partial thrombopastin time 50 seconds (control 11), FDP's 1000 mg/dl (normal <500mg/dl) and serum fibrinogen level of 2.6 gm/L (normal 2.0-4.5 g:mJL). Thick and thin peripheral blood smears for malarial parasite and hepatitis B serology were negative. A diagnosis of hepatic encephalopathy with a bleeding tendency due to acute fulminant hepatic failure, probably of viral aetiology, was made and swndard treatment (protein restriction, intravenous dextrose, vitamin K, lactulose through nasogastric tube and fresh frozen plasma as a source of ciottmg factors) was initiated As she was also febrile therefore, after taking samples for bacterial cultures, parenteral cephridine, gentamici and metronidazole were started. Her condition continued to deteriorat over the next four days. Induction of labour was undertaken after an ultrasound examination confirmed an intrauterine death. The high grade fever persisted (upto 104 F but by this time the blood culture report was received as being a positive growth of Salmonella typhi; on day 4 antibiotic treatment was changed to ofloxacin 400 mg twice daily via the nasogastric tube. She regained consciousness within the next 24 hours and thereafter, there was a steady and gradual improvement in all parameters, leading to her discharge on day 14.

Discussion

The case report is of a pregnant woman who presented with features of acute hepatic dysfunction initially thought to be. of viral aetiology but later confirmed to be due to Salmonella infection. Hepatic involvement in enteric fever, although uncommon, is well documented[3,4]. While the hepatic manifestations generally are of no great clinical significance, in a small proportion of cases, they can cause diagnostic difficulties[5]. Anaemia, malnutrition and poor ill health may predispose the patients to more significant hepatic involvement[4]. In our patient rapid and complete recovery were thought to be against a viral aetiology; acute hepatic failure of viral aetiology has got a very bad prognosis, with mortality over 80%[6]. Clinically persistence of high grade fever throughout the illness and jaundice of mild intensity were considered to be points favouring abacterialaetiology of the disease. Salmonella

infection can have adirecteffectonthe cerebral function[7] and it is postulated that the neurological status of the patient on presentation was related not only to hepatic dysfunction but also to a direct toxic effect of Salmonella infection on the brain in endemic areas, ma patient who presents with features of acute liver failure, the diagnosis of enteric fever should always be considered. This is a potentially lethal condition and as blood cultures are positive in less than 50% of the patients[8] appropriate antimicrobial treatment may be justified on clinical suspicion.

References

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