## **Case Report**

# Hodgkin's disease presenting as cholestatic jaundice

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### **INTRODUCTION:**

Hodgkin's disease is among the common diseases that affect the lymph nodes and can present as fever of unknown origin. However, its presentation with obstructive jaundice has been reported only rarely (1-4). Although it can present some times as a febrile illness (5), a cholestatic presentation with febrile illness is rare (6). We present a case here in which a patient developed prolonged fever with jaundice which had obstructive pattern and her final diagnosis was made at laparotomy. The obstructive jaundice was thought to be due to Hodgkin's disease.

#### **CASE REPORT:**

Patient is 45 years old lady who presented with history of fever and jaundice for two months. The fever was high grade and continuous and it was associated with chills and sweating. Her previous work up has been negative for malaria, typhoid and brucella. She has been treated with anti-malarials and antibiotics without any improvement. Examination revealed an ill-looking lady with a of 101  $^{0}$ F, pulse 100/min. She was jaundiced. Liver was palpable three finger breadths below right costle margin and the spleen was also enlarged. No ascites or a mass was palpable. Rest of the examination was unremarkable.

Laboratory investigations showed a hemoglobin 10.5g/dl, hematocrit 30.4%, MCV 84.3, a white blood cells count was 12,200/cmm, and platelet count was 195, 000/cmm.

Electrolytes were normal. Total bilirubin was 6.3mg/dl, direct bilirubin 4.42mg/dl, ALT 27 iu (normal <31), AST 25 iu (normal <31), and an alkaline phosphatase of 567 iu (normal <120). Protime (PT) was 18.2 seconds. Hepatitis B surface antigen, anti-HCV, anti-nuclear antibody (ANA) and chest x-rays were normal. Malarial parasite and brucella antibodies were negative. An ultrasound of the abdomen showed hepatosplenomegaly and focal lesions in the liver and spleen and a small amount of fluid in the pelvis. A CT scan of the abdomen confirmed these findings. An exploratory laparotomy revealed lymph nodes in the porta hepatis which were biopsied. Histopathology report showed Hodgkin's disease of mixed cellularity type. Patient was started on chemotherapy and showed response.

## **DISCUSSION:**

The Hodgkin's disease caused obstructive jaundice and showed lesions in the liver and in the porta hepatis. A liver biopsy was not performed on this patient as negative results are often found and eventually patients have to under go open biopsy. The best approach for this patient for a diagnosis was though to be exploratory laparotomy which gave us the final diagnosis. Patients with presentation like this often have needed an invasive procedure like laparoscopy or laparotomy for their diagnosis (7-9). Although, in some case fine needle aspiration of extra nodal tissue with cytology may be helpful (8). Due to the prolonged febrile illness with jaundice and possibility of condition deteriorating, it was thought that quickest way of getting to the diagnosis was laparotomy in this case.

Patients with Hodgkin's disease have presented very rarely with cholestatic picture and vanishing bile duct with bile duct injury (10, 11). Some of these patients have shown bile duct injury with florid inflammatory reaction in the bile ducts (3,10,11). Rare patients with Hodgkin's disease had involvement of the liver to such a degrees that they presented with hepatic failure (12).

Intra hepatic cholestasis is characterized by decrease in bile flow in the absence of overt bile duct obstruction resulting in accumulation of bile constituents in the liver and in the blood and there can be various etiologies of this condition (13). Hodgkin's disease involved the liver in this case, and there was no extra hepatic biliary obstruction noted either on sonography or C.T scan. Pathogenesis of cholestasis in these cases in generally unclear, although several hypothesis have been mentioned (13). Patients who respond to chemotherapy and appropriate treatment do show resolution of their jaundice after the treatment (1).

In conclusion, the patients who present with cholestatic jaundice may have underlying lymphoma especially if they have febrile illness and it should be remembered that a rare condition, like Hodgkin's lymphoma can present this way and should be kept in mind for early diagnosis.

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