JAUNDICE, AN EARLY CLINICAL MANIFESTATION OF SECONDARY SYPHILIS
(A case report)

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Summary

Hepatitis is an uncommon manifestation of early acquired syphilis. A case of secondary syphilis presenting with jaundice and papular eruption is reported. The icterus was slight and responded promptly to penicillin therapy; transaminase levels were moderately increased. Alkaline phosphatase was elevated.

Jaundice was due to an increase of both conjugated and unconjugated bilirubin : serological reactions for syphilis were positive.

Hepatic involvement has been described in early syphilis ; however it is unusual. Hahn[1] reported only eighty cases of liver enlargement out of 33,825 cases of secondary syphilis (0.24 percent). Leonard[2] reported 59 cases from the literature and a personal one of acute yellow atrophy of the liver in early syphilis. Other complications with hepatitis including periostitis, iritis with papillitis and meningitis have been reported[3]. Hepatitis and nephrotic syndrome[4] and osteolytic lesions[5] have also been described.

An unusual case of secondary syphilis presenting with jaundice is herein described, and the rarity of this finding is discussed.

Case Report

A 30 year old male caucasian was admitted in June, 1978 with a history of passing dark yellow urine for a week, followed by a rash on the trunk, palms, soles, genitals and perianal areas. There was mild itching. There was no history of drugs, alcohol, injections, contact with chemicals or genital ulceration.

Examination revealed jaundice without fever or enlargement of the liver and spleen. There was a maculopapular rash on the trunk, palms and soles ; scanty penile and perianal lesions were noticed. Inguinal and axillary lymphonodes were enlarged.

Laboratory Finding and Treatment

Erythrocytes, leucocytes and blood sugar were within normal limits. Erythrocyte sedimentation rate was 21 mm in 1st hour. Serum total bilirubin level was 5.3 mg per cent. Direct Van den Berg test was positive. Direct bilirubin was 1.8 mg per cent; and indirect bilirubin 3.5 per cent. SGOT 165 units; SGPT 190 units ; YT 113 units. Tests for Australia antigen proved repeatedly negative. Alkaline phosphatase was 226 mU per cent (normal values 40–190 mU).

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Liver biopsy was not performed because of patient's refusal. VDRL was strongly reactive and FTA proved strongly positive. Daily injections of benzyl penicillin were given for 20 days, for a total of a 20,000,000 (million) units. Cutaneous lesions and icterus gradually responded to treatment. No Herxheimer reaction occurred. Three more courses of benzyl penicillin were given in the same year. The standard serological tests for syphilis became negative 18 months later. Serum transaminase levels became normal two months after admission. No hepatic sequelae were observed over a period of two years.

Discussion

Icterus due to early syphilis is an uncommon but a well known finding. The problem of liver damage in secondary syphilis has been stressed by many authors[6,7,8,9,10]. Falchi and Flarer[11] and Midana and Del Grande[12] had observed liver function impairment in secondary syphilis. Liver biopsies performed by Pareek[13] in six patients with secondary syphilis showed morphological integrity of hepatic lobule without necrosis or fibrosis. However a lympoplasmocytic infiltration was demonstrable around portal lumina, with minimal cholestatic signs.

Typical histologic changes, according to Sherlock[14], consist of small interacinar granulomata and diffuse inflammation. Other authors report that liver involvement in early syphilis does not show specific pathologic changes[7]. Our patient proved to be Australia antigen negative. This does not exclude, of course, viral hepatitis. According to some reports, sexual transmission of hepatitis B[15,16] takes place.

The following symptomatology was taken into account for diagnosing early syphilitic hepatitis in our patient. Mild jaundice which preceded secondary syphilitic skin changes by a few days, moderate increase in serum transaminase levels, not as high as what is seen in acute viral hepatitis; absence of pyrexia, nausea, vomiting and malaise, increase in levels of alkaline phosphatase considered to be typical of the cholestatic type of hepatitis and elevation in serum bilirubin levels. These may be related to both conjugated and unconjugated pigment. Syphilitic hepatitis is assumed to be related to a direct action of treponema on the hepatocyte and cholestasis intrahepatica, with the presence of indirect inflammatory reactions.

Our patient was not taking any drug or alcohol. The course of the disease, with rapid resolution after penicillin treatment suggests a diagnosis of hepatic syphilis.

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