An unusual case of jaundice

Introduction

Syphilis is increasing in incidence, and can present to a variety of specialties as seen in this case. A high index of clinical suspicion is required and the importance of taking a sexual history must be remembered.

Discussion

Syphilis was described as 'the great pretender' by Sir William Osler in 1907 as 'there is no organ in the body, nor any tissue in the organs, which syphilis does not invade'. It can present in many different ways to a number of different specialists and increased clinical awareness is needed.

Between 1996 and 2005 the Health Protection Agency (2006) reported an increase of 1954% in the incidence of syphilis. This patient did not present with the classical signs of a painless penile ulcer but with early syphilitic hepatitis, a rare complication. Jaundice as a complication of syphilis was first described by Paracelsus in 1585. The incidence of jaundice in syphilis varies from 0.37 to 1.4% (Wile and Karshner, 1917) and in earlier studies where patients received arsenical treatment it was difficult to decide if the liver damage was a result of the infection or the treatment (Hahn, 1943). Jaundice during the course of early syphilis may occur before the chancre appears, or be coincident with the chancre; more frequently it occurs during secondary syphilis (Wile and Karshner, 1917).

Syphilis is a systemic disease and organisms resembling treponemes were seen in the liver biopsy of seven out of 17 cases with syphilitic hepatitis by Fehér et al (1975). No pathognomonic histological findings have been described.

A disproportionately elevated alkaline phosphatase relative to alanine aminotransferase is the most consistent laboratory finding associated with syphilitic hepatitis (Baker et al, 1971; Lee et al, 1971; McMillan et al, 1977), but it is not seen in all cases (Fehér et al, 1975; Veeravahu, 1985).

This case also highlights the importance of taking a sexual history, which may have avoided a delay in diagnosis in this patient. Men who have sex with men are at an increased risk of syphilis and more than half the cases of syphilis diagnosed in the UK between 2001 and 2004 were in men who have sex with men (Health Protection Agency, 2004). Also syphilis can be transmitted by unprotected oral sex (Ciesielski et al, 2004) and many people do not consider this to be risky sex (Cook et al, 2001) so may not mention it unless directly asked.

All health professionals need to be aware that the incidence of syphilis is increasing and may present in many different ways. A high index of clinical suspicion is required and taking a sexual history is vital. BJHM

Dr Lisa Kozakis *is Specialist Registrar and* **Dr Thambiah Balachandran** *is Consultant in Genitourinary Medicine in the Department of Genitourinary Medicine, Luton and Dunstable Hospital Foundation NHS Trust*

Correspondence to: Dr L Kozakis, Watford Sexual Health Clinic, Watford Hospital, Watford WD18 0HB

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Case Report

A 41-year-old stock-taker presented with a 4-week history of lethargy, decreased appetite and weight loss, following a short flu-like illness. Three weeks previously he had noticed jaundice, pruritus, pale stools and dark urine. He denied recent travel, illicit drug use or contact with anyone with similar symptoms. There was no significant past medical or family history. He took no regular medication, smoked 20 cigarettes daily and drank alcohol occasionally.

On examination he was deeply jaundiced, and had an enlarged non-tender smooth liver palpable to 2 cm below the costal margin but no splenomegaly, peripheral lymphadenopathy or stigmata of chronic liver disease. The examination was otherwise unremarkable.

Liver function tests revealed albumin 27 g/litre (normal range 36–52 g/litre), alkaline phosphatase 661 IU/litre (normal range 25–120 IU/litre), alanine aminotransferase 116 IU/litre (normal range 0–63 IU/litre), bilirubin 173 umol/litre (normal range 6–28 umol/litre), and amylase 132 IU/litre (normal range 15–85 IU/litre). Other routine blood tests were normal. Tests for hepatitis B and C were negative and hepatitis A serology indicated previous infection only. The following tests were also negative or normal: auto-antibody screen, a paraprotein, anti-neutrophil cytoplasmic antibody IIF, alpha-1 antitrypsin, copper, ceruloplasmin and percentage of free copper. An abdominal ultrasound scan showed no abnormalities.

An ultrasound-guided liver biopsy suggested bile duct stasis, possibly with obstructive aetiology. There was some chronic inflammation and bridging fibrosis but no frank cirrhotic changes. Sclerosing cholangitis was suspected, so the patient underwent an endoscopic retrograde cholangiopancreatogram that was inconclusive.

Seven weeks after his initial presentation, he was referred to a tertiary centre for further assessment and on direct questioning he admitted to being bisexual. He was also noted to have an exfoliative eczematous-type rash on the palms and soles. Serological tests were consistent with secondary syphilis of which hepatitis is a rare complication. A human immunodeficiency virus antibody test was negative.

He was referred to the genitourinary medicine department and treated successfully with intramuscular procaine penicillin 600 000 units daily for 17 days.