

Why so yellow, Henry? (answers on page 49)

Part one

Henry, a 24-year-old aid worker from Britain, had been in Africa only a month when he developed a relatively minor upper respiratory infection. He had a cough, sneezing, and irritated throat and eyes. As there were many people in the small town in which he was working with similar symptoms, he took little notice and continued to work. However, 3 days into this minor illness he developed jaundice – a colleague noticed that his sclera were yellow. He made sure that Henry visited the doctor, who admitted him to the local hospital for investigation. By this time, the respiratory tract symptoms were subsiding, and Henry protested that he was not feeling ill, had no pain or itch, and did not need medical attention. His urine had not changed colour, and his stools were the usual brown colour; there was no diarrhoea.

Q1 Before you know the results of the blood tests, what is the most likely diagnosis in Henry's case?

- (a) Acute hepatitis A. (b) Acute cholangiitis. (c) Gilbert's syndrome.
(d) Gallstones. (e) Cholecystitis. (f) Malaria.

Part two

As the hospital medical officer you find that his physical examination, apart from the obvious jaundice, is unremarkable, with no hepatosplenomegaly or abdominal tenderness. There is no bilirubinuria on dipstick testing; urinalysis is normal. Blood bilirubin concentration is 50 micromol/litre (the normal upper limit for your laboratory is 22 micromol/litre). Alanine transferase, alkaline phosphatase, gamma-GT, and albumin/globulin ratios are all within normal limits. You feel that you can make the diagnosis from these results, especially as Henry mentions that he has had an episode of jaundice like this 2 years before, but no cause for it was found. You feel that you can make a definite diagnosis from these facts.

Q2 What are the consequences for Henry of this decision?

- (a) He should absolutely avoid alcohol.
(b) He should avoid paracetamol except in much smaller doses than recommended.
(c) You should confirm your diagnosis by measuring conjugated and unconjugated blood bilirubin levels.
(d) A full blood count to rule out haemolysis is advisable.
(e) If there had been bilirubinuria, the diagnosis is wrong.

Part three

Q3 How many of the following make your diagnosis virtually certain?

- (a) Unconjugated hyperbilirubinaemia with conjugated bilirubin in the normal range.
(b) Normal liver enzymes.
(c) Normal albumin and globulin.
(d) The sole symptom is jaundice.
(e) Absence of haemolysis, with normal haemoglobin and reticulocyte count.

Part four

Q4 What other tests should you order to make certain of your diagnosis?

- (a) 48-hour fasting to provoke rising bilirubin levels.
(b) Genetic testing to confirm the defect causing the condition.
(c) Liver and biliary imaging to rule out any obstruction or disease.
(d) Viral studies to rule out a minor hepatitis infection.
(e) None: the diagnosis is clear from the history, examination, and investigations, and further tests would only increase anxiety and be unnecessary.

Part five

Q5 What do you tell Henry about his condition?

- (a) It is not a disease, but a simple genetic change in which he has a slightly higher bilirubin than normal which sometimes shows up as jaundice.
(b) It will not lead to future liver damage.
(c) It does not shorten life.
(d) He does not need to follow a low fat or low protein diet.
(e) If he needs medical attention in future he should mention his problem so that he can avoid drugs that might provoke difficulties.
(f) If he has jaundice that is deeper or lasts longer than usual he should see a doctor, because it suggests that he has another, separate illness.