

# Drinking discomfort (answers on page 35)

## Part one

John, aged 44, a man of European ancestry, living in an East African city, came to his doctor complaining of general weakness that had slowly developed over the previous six weeks or so. He noticed an odd discomfort, not really pain, in his chest when walking briskly, and his wife added that he looked much paler than normal. She also thought that the whites of his eyes were 'a bit yellow'.

Resting in the consulting room, his heart rate was regular and 76 beats per minute, his blood pressure was 145/80, and his chest was clear. The only abnormal finding was a slightly tender liver extending to three inches below the right costal margin. He admitted to being a 'recovering alcoholic' and had stopped drinking over 15 years before – which his wife confirmed.

- Q1 Which of the following are among your immediate thoughts, priorities and actions?**
- Have doubts about the alcohol history and consider alcohol-linked liver disease
  - Wonder about possible drug abuse
  - Ask about illness in close family members
  - Do a full neurological examination
  - Admit him to the hospital for full blood tests

John remembers a paternal uncle had died in his forties of 'a sort of anaemia' the details of which he did not know. He has also added that at times he had 'pins and needles' in his toes, which often felt numb, too. The initial blood test results include a haemoglobin of 75g/L, a mean corpuscular volume of 112 fL and a haematocrit of 20.4 %. The white cell count was in the normal range.

## Part two

- Q2 What do you now include in the differential diagnosis?**
- Iron deficiency anaemia
  - Viral hepatitis with associated anaemia
  - Early alcoholic cirrhosis with anaemia
  - Pernicious anaemia
  - Folate deficiency anaemia
  - Early aplastic anaemia

The second batch of blood tests show a reticulocyte production index of 0.5, lactate dehydrogenase (LDH) of 1350 U/L, a serum cyanocobalamin level of 55 pmol/L, serum ferritin of 185 ng/L, and a folic acid level of 28 nmol/L. There was macrocytosis and many neutrophils were hypersegmented.

## Part three

- Q3 From these results you have made your diagnosis. Which of the following do you consider doing next?**
- Organise an upper gastrointestinal endoscopy
  - Test for *H. pylori* infection
  - Organise detailed liver function tests
  - Arrange for liver biopsy
  - Start vitamin B 12 injections
  - Start oral folic acid treatment

## Part four

- Q4 How would you further manage John's illness?**
- Lifelong monthly vitamin B12 injections
  - Lifelong daily folate tablets
  - Start with high dose steroids, and taper them off after he responds
  - Daily oral iron (to start with as ferrous sulphate)
  - Consider repeated blood transfusions
  - Annual checks for cancer and autoimmune disease, particularly of the thyroid