

A 42-year old tyre fitter went to his doctor because he had fainted on two recent occasions at work. He admitted to feeling under the weather for some months and was readily made breathless by exercise. The doctor noted he was pale and had a heart rate at rest of 105. She took a blood sample for haematological examination, and when it was reported as showing a haemoglobin of 8.4g/dl (normal 13g/dl) and microcytic hypochromic erythrocytes, she prescribed a course of iron tablets. Over the next few months his symptoms improved slowly, but he reappeared in the surgery a year later complaining of cramp-like lower abdominal pains and a conspicuous change in bowel habit, with alternating constipation and diarrhoea. In the hospital admission that was immediately arranged, he underwent an operation in which a segment of the sigmoid colon and rectum was removed. The appearances, on opening along its length, are shown in **picture A**. Several lymph nodes were recovered from the paracolic tissues, one of them with the histology shown in **picture B**. He seemed to be doing well after the operation, apart from some discomfort in his right leg, which (in addition to his abdominal wound) made it painful to move around the ward. On the fifth postoperative day he was discovered, acutely breathless, cyanosed (i.e. bluish-coloured) and collapsed on the floor in the toilet. Attempts to resuscitate him were unsuccessful and he died within a few minutes. At autopsy there were significant findings in the lung and liver, a slice of liver is shown in **picture C**.

## QUESTIONS

1. Describe the features shown in pictures A, B, and C, using them to reach a diagnosis, and relating them to each other.

[Picture A](#)

[Picture B](#)

[Picture C](#)

2. What common possibilities might account for the man's sudden death? How would these be disclosed by the autopsy findings, and what would the findings in the lung be? What features in the history place this patient at particular risk of such events?
3. In retrospect, there were serious errors of omission in the management of this case. In the light of your knowledge of the pathology involved, what were they, and what difference in outcome might have been secured had they been avoided?
4. 42 is a rather young age to develop this disease, suggesting a genetic predisposition. What are the possibilities, and what further action should now be taken?