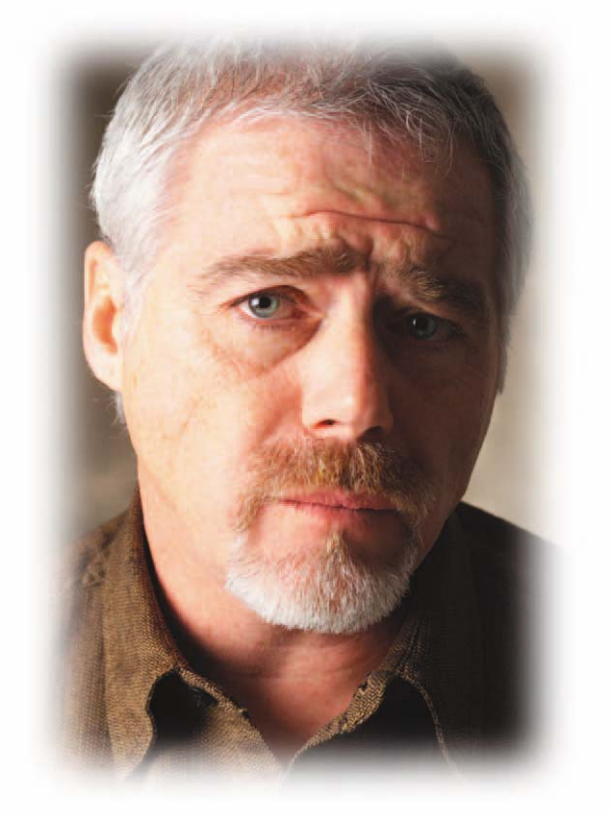

Case Study

Pyrexia of Uncommon Origin

An offhand remark about a fever and slight nasal congestion leads to a rather startling diagnosis.

By David S. Rosenberg, MD, BSc.

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THE INITIAL PRESENTATION

The patient was a 51-year-old male whom I had known for the past 10 years. During this particular visit to my office, he asked me to examine several scalp lesions. I was able to assure him they were benign in nature.

Then, as I was leaving the examining room, he uttered the words that would dramatically alter his life: "And, by the way, Doc…."

It seemed that, for the past several days, he had a fever accompanied by very slight nasal congestion. I advised him that, in all likelihood, he had a viral infection and I recommended that he treat it symptomatically.

THE PATIENT RETURNS

Five days later, the patient was back in my office complaining of daily persistent fever spiking as high as 40 C to 42 C. There were no other symptoms and no findings on physical examination. Investigations performed that day (chest X-ray, complete blood count and urinalysis) were negative, except for a slight leukocytosis. I advised him to continue with acetominophen or ibuprofen as required.

He returned two days later, still experiencing an unrelenting high fever, unaffected by anti-pyretic medication. He remained otherwise asymptomatic. After ordering further blood work, I was startled to discover all his liver enzymes were elevated.

Read up on witch prickers and tortures. *Medicine of History*, Page 65

A DEEPENING MYSTERY

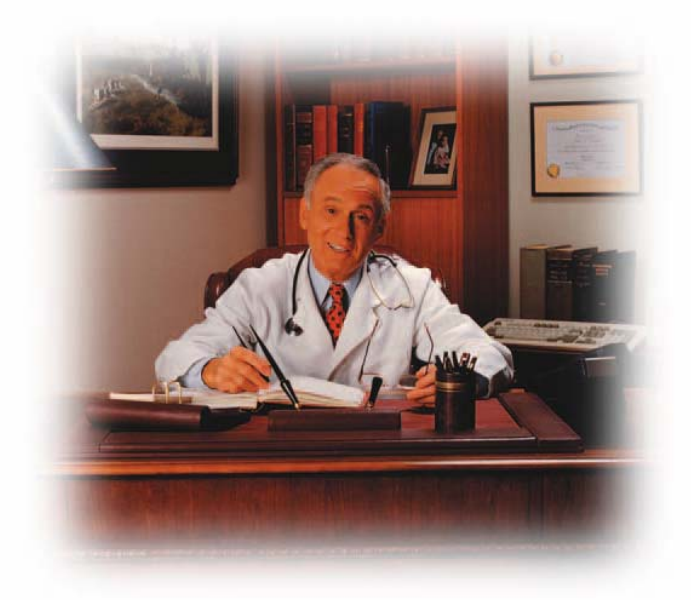
The patient arrived at my office soon after I contacted him at home. His sclerae looked slightly icteric, his liver edge was palpable and there was tenderness in the right upper quadrant.

As he waited with his wife in the reception area, looking diaphoretic and extremely unwell, I consulted with a gastroenterologist colleague who consented to the patient's referral.

Soon after his arrival in the emergency department, the patient was admitted to the hospital. Initially, there was great concern that he had a malignancy, as investigations demonstrated the presence of a mass in his liver, occupying most of the left lobe, and a mass associated with the second part of the duodenum and the head of the pancreas. All involved tissues were biopsied. The liver tissue grew strep viridans, the same bacterium that had grown in his blood culture. As strep viridans may cause endocarditis, the patient had an echocardiogram, which was normal. After antibiotic treatment was initiated, the patient improved and was discharged about 10 days after his admission.

THE TWIST IS IN THE GIST

There still remained a big question, however, about the peripancreatic mass. A subsequent biopsy of this lesion revealed "spindle cells," which the pathologists agreed reflected a gastrointestinal stromal tumour (GIST) (*i.e.*, a leiomyoma of the smooth muscle layer of the duodenum).



He was referred by the attendant gastroenterologist for a surgical opinion. After further investigations, including a magnetic resonance imaging (MRI) scan, and weeks of further pre-surgical antibiotic thera-

py, the patient underwent a traditional Whipple pancreaticoduodenectomy wherein a 9 cm GIST was resected.

One month later the patient was discharged from hospital. He made a speedy and excellent recovery, regaining most of his weight and energy. To date, he has not experienced either a recurrence of his tumour or any post-surgical sequelae. Dx

GETTING THE GIST OF THINGS

- GISTs occur predominantly in middle-aged and older persons.
- There is equal incidence in men and women, although some studies report a female predominance.
- Seventy per cent of tumours occur in the stomach, while 20% to 30% occur in the small intestine.
- GISTs are primarily intramural tumours involving the submucosa and muscularis propria and extending into the mesentery or subserosa.
- GISTs often are clinically silent until they reach a large size, bleed or rupture.
- They rarely metastasize to lymph nodes.
- Most duodenal GISTs occur in the second part of the duodenum, where they push or infiltrate into the pancreas.
- The two most important prognostic factors (low, intermediate or high risk) are tumour size and mitotic index (the number of mitoses/50 high-power fields).