therapies and radiotherapy needed to treat a metastasis of the brain caused by total alopecia.

Case 2—A man aged 29 had been examined when he was 20 but had not been given any advice about his undescended testicle. Three years before diagnosis he saw an orthopaedic surgeon for backache attributed to driving a car. The pain fluctuated but persisted, and twice he was admitted to hospital as an emergency because of severe exacerbations. The pain was thought to be renal in origin, but results of intravenous pyelography were normal (although on review lateral displacement of the left kidney was evident). A nodule

Symptoms present in untreated patients with more than six months' delay from first symptoms to first treatment

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Duration</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gynecomastia</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Backache or abdominal pain, or both</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Painful nodule or swelling</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Post-traumatic or postinflammatory swelling</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Lost on waiting list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undescended testicle</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Excludes one patient with eight months' delay equally divided between patient, general practitioner, surgeon, and radiologist who was lost for two months on waiting list.

Noted in his right testicle was not thought to be important, but a year later, when a further opinion was sought from a urological surgeon about his renal pain, it was found to be a small malignant teratoma. His backache resolved within 48 hours after the start of treatment and did not recur.

**Comment**

Diagnosis of testicular tumours is not always easy, and most delays in diagnosis occur in patients undergoing investigation of symptoms that are subsequently shown to have been caused by metastases. Patients' embarrassment in seeking help is also a factor. This report emphasises the importance of careful palpation of the testis in young men with symptoms of indeterminate origin, and also that some doctors are unaware that an important minority of testicular tumours can present either as small nodules in the testis without gross swelling or as a painful testis mimicking epididymo-orchitis.

Case reports

In 24 of 52 patients with teratoma and five of 12 patients with seminoma the delay in diagnosis was over six months. The table summarises the symptoms at presentation and the stage in the diagnostic process that produced the longest delay.

**Case 1**—A 25 year old man had had a painful, swollen testicle of acute onset and been treated with antibiotics two years before diagnosis. Though his general practitioner was aware that the swelling persisted the testicle was not re-examined at subsequent visits. Because the patient was shy about being examined he did not seek advice even though he noticed that the swelling had increased. One month before diagnosis he developed abdominal pain, and he was finally admitted to hospital after further delay with obstructed jaundice and vast abdominal, testicular, and lung masses. After chemotherapy and extensive thoracoabdominal surgery he remained free from disease for four years, though the combined effects of chemo-

**Obstructive jaundice caused by corrosive injury to the duodenum**

I report an unusual case in which ingestion of mineral acid caused extensive duodenal injury, resulting in obstructive jaundice presumed to be due to fibrosis of the duodenal papilla.

**Case report**

A 66 year old man was admitted six hours after ingesting hydrochloric acid solution with the intention of committing suicide. He had lost his job (his family's main source of income) and had consequently become depressed.
He had drunk about 250 ml of concentrated hydrochloric acid (32%, w/v, 8N, pH 0-9) used for acid burns on his lips and oral mucosa and mild tenderness in the epigastrium but no other abnormal physical signs.

He was given oral antacids and was fed intravenously. Barium meal examination five days later showed that the oesophagus and proximal part of the stomach were normal, but the distal part and the prepyloric antrum were narrowed and irregular; the duodenum was normal. Endoscopy showed a normal oesophagus and mild inflammation of the proximal part of the stomach. The mucosa of the distal part and antrum showed severe necrosis and ulceration. Narrowing of the pyloric canal prevented inspection of the duodenum.

A psychiatrist diagnosed reactive depression and arranged for a social worker to help ease the family's financial problem. On discharge the patient was well and eating normally.

He was readmitted seven weeks later having vomited undigested food and passed pale stools and dark urine for four days. He looked ill, dehydrated, and jaundiced and had a dilated stomach with a succussion splash. Biochemical investigations confirmed obstructive jaundice, and barium meal examination and gastroscopy showed complete pyloric stenosis. Ultrasound scanning of the abdomen showed a dilated extrahepatic biliary system down to the ampulla of Vater but no other abnormalities; the pancreas was normal.

The dehydration and clotting disorders were corrected, and intravenous feeding was begun. Because of deepening jaundice and general deterioration laparotomy was done. The prepyloric antrum and duodenum down to the duodenojejunal flexure were considerably thickened and contracted, and the gall bladder and common bile duct were dilated. Palpation of the head of the pancreas was normal. A duodenotomy showed that the wall of the duodenum was thickened, and its lumen, which was almost obliterated, contained no bile. The mucosa was inflamed and ulcerated, and the duodenal papillae were unidentifiable. A full thickness biopsy specimen of the duodenum was taken and the duodenotomy closed. A loop of jejunum was sutured to the gall bladder and stomach to create a cholecystojejunojejunostomy and a gastrojejunostomy, bypassing the head of the pancreas and the duodenum (figure). Histological examination of the duodenal biopsy specimen showed ulceration of the mucosa, round cell infiltration, and extensive fibrosis of the duodenal wall. He recovered completely, the jaundice cleared, and he gained weight with a normal diet. Computed tomograms of his abdomen three and six months later showed no evidence of tumour in the biliary tree or pancreas.

Comment

Clinically important corrosive injury to the upper gastrointestinal tract after ingestion of mineral acid occurs most commonly in the prepyloric antrum and sometimes in the oesophagus.1 Damage has also been reported in the proximal duodenum and the ileum in cases of severe ingestion.1,2 The cause of obstructive jaundice in this patient was thought to be either a coexisting lesion in the biliary tree or pancreas, such as stones or a tumour, or the result of duodenal injury caused by ingestion of acid. A lesion was unlikely because of the lack of evidence at laparotomy and the negative results of computed tomography. Thus it appears that if severe fibrosis in the duodenal wall spreads into the papillary area complete obstruction of the common bile duct may occur, leading to obstructive jaundice.


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Loss of form in young athletes due to viral infection

Many athletes experience sudden and unexplained deterioration in performance in training or competition. This is often attributed to overtraining or psychological factors, but a medical illness may cause a temporary loss of form in a previously fit athlete. In the past year I have seen 12 athletes complaining of loss of form with no features suggesting an underlying medical cause. No medical abnormality was found in eight of them, though four were undergoing the stress of academic examinations. The four others showed evidence of a recent viral infection and are reported on here.

Case reports

Case 1—A 15 year old middle distance runner complained of loss of stamina and inability to manage his normal training schedule. His competition performance had also deteriorated. The problem had been preceded by a mild infection of the upper respiratory tract and a sore throat not serious enough for him to have consulted a doctor. Examination showed several small supravacular lymph nodes. Atypical mononuclear cells were visible in a blood film, and a screening test for infectious mononucleosis (Monospot) gave positive results. Training was temporarily reduced, and he had regained his form after four months.

Case 2—An 18 year old cross country runner complained of two months of malaise, tiredness, and difficulty in training. She had not had any upper respiratory tract symptoms. Examination gave normal results. Estimation of viral titres showed a considerable increase in Coxsackie B2 (1/512), indicating recent infection. After a short recovery period she regained her form over three months.

Case 3—An 18 year old cross country runner presented with loss of stamina, being unable to maintain his former training schedule. He had had minor symptoms of the upper respiratory tract. Physical examination gave negative results, but he had a raised aspartate transaminase activity of 57 IU/l (normal range 12-42), which suggested mild hepatitis. A Monospot test gave positive results, indicating recent infectious mononucleosis. Six months later he was still complaining of tiredness and aching legs and had not been able to repeat previous performances.

Case 4—A 20 year old international sprinter had had an infection of the upper respiratory tract two months previously. She had subsequently felt weak and dizzy during training and had been unable to maintain her former training capacity. Examination gave negative results. Measurement of viral titres showed a pronounced increase in Coxsackie B3 (1/256), indicating recent infection. Her loss of form persisted throughout the track season.

Comment

Two of these highly trained athletes had had no prodromal symptoms, and two had had minor symptoms of the upper respiratory tract. All had evidence of recent viral infections as shown by increased titres of antibodies against Coxsackie B or Epstein-Barr virus, and one had morphologically abnormal white blood cells suggesting recent viral infection.1

Viral infections are blamed for many minor illnesses. They may be subclinical and may give rise to symptoms beyond the acute infective phase. This post-viral syndrome produces various physical abnormalities, including excessive intracellular acidosis of skeletal muscles and persisting abnormal function of T cells.1,2 Pether

Gastrojejunostomy and cholecystojejunostomy created to bypass obstructed stomach and common bile duct. Hatched area shows extent of damage caused by ingested acid to stomach and duodenum.