

Multisystemic tuberculosis presenting with scrofula, intestinal and pulmonary involvement

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DESCRIPTION

We present the case of a 69-year-old woman with no relevant medical history who was admitted to the emergency room (ER) with asthenia, anorexia, weight loss, periodic fever and night sweats. Observation revealed a palpable and painful rubbery cervical mass adherent to deep tissue that had been enlarging during the past 3 months. The laboratory workup showed mildly elevated inflammatory parameters (leucocytosis 14 000/ μ L with 78% neutrophils and C reactive protein (CRP) 17 mg/dL). She was referred to haematology/oncology outpatient consultation with support therapy.

On ambulatory follow-up, bone marrow aspirate and bone biopsy were performed due to lymphoproliferative disease suspicion. The cervical mass was submitted to open biopsy revealing a cavity with pus and caseum-like exudate that was sent to the pathology and microbiology laboratories. HIV serology was negative.

Three weeks later, the patient returned to the ER due to a syncopal episode. She was febrile (38.6° C), with blood pressure 106/68 mm Hg and heart rate 91 bpm. She had nausea, vomiting and abdominal pain. Her abdomen was tender and painful in the right lower quadrant. She had leucocytosis (17 600), neutrophilia (95.3%), CRP 32.43 mg/dL, hypokalaemia (K 2.7 mEq/L) and hypoproteinaemia with hypoalbuminaemia. Pathology and microbiology results of lymph node biopsy showed a positive smear for acid-fast bacillus and epithelioid granulomas with central necrosis and multinucleated giant cells of Langhans on bone biopsy. The *Mycobacterium tuberculosis* complex was isolated.

She was started immediately on quadruple antituberculous therapy and was admitted to the medical ward. Chest X-ray showed bilateral interstitial infiltrate suggestive of miliary lesions not present at her



Figure 2 Abdomen CT scan showing a thickening of the ileocecal valve and large mesenteric adenopathies.

first admission. A thoracoabdominal-pelvic CT scan described bilateral micronodular lesions of the lungs and thickening of the walls of the terminal ileum (figures 1 and 2). She was also started on ciprofloxacin for infection on the surgical wound from the open biopsy.

Forty days after the beginning of antituberculous therapy, the patient's status deteriorated with intense abdominal pain and vomiting. Her abdomen was distended but soft with tenderness in the upper quadrants and plain abdominal radiography showed air-fluid levels. Laparotomy was performed revealing intestinal inflammatory adhesions, stenosis of the ileocecal valve and large mesenteric adenopathies (figure 3). Ileocecal resection and anastomosis were performed with apparently clean margins. Three days later, her clinical status deteriorated again and she was operated on again with evidence of anastomotic dehiscence and perforation of the ileum. The pathology result from the surgery samples showed transmural infiltrates with aggregates of epithelioid



Figure 1 Thorax CT scan showing uniformly sized small nodules randomly distributed throughout both lungs (miliary tuberculosis).

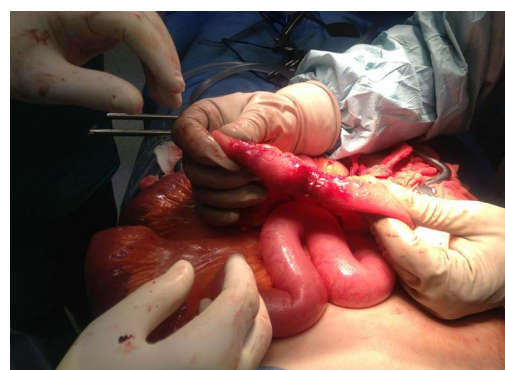


Figure 3 Photograph showing inflammatory changes and a stenosis in a portion of the bowel.



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cells, outlining granulomas without necrosis. The granulomatous process extended to pericolic adipose tissue and reached the ends of the workpiece. An isolated lymph node was consistent with granulomatous lymphadenitis without necrosis.

The patient died a few hours later after the second surgery with the diagnosis of severe sepsis and multiorgan failure due to faecal peritonitis and multisystemic tuberculosis.

Learning points

- ▶ Tuberculosis should always be suspected and never be underestimated. It can affect anybody at any age and requires urgent and aggressive management as it can be fatal.¹
- ▶ Lymphadenitis is the most commonly occurring form of extra pulmonary tuberculosis with cervical adenopathy representing 17% of cases.²
- ▶ Complications of intestinal involvement include obstruction, perforation and fistula formation, perforation being the most serious complication, associated with high morbidity and mortality.³

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