

# The acute AIDS abdomen – a prospective clinical and pathological study

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## Summary

**Objectives.** Patients with AIDS who present with an acute abdomen pose a new challenge to surgeons. The purpose of this study was to determine the nature and outcome of intra-abdominal catastrophes in AIDS patients.

**Methods.** A prospective clinical study was conducted on HIV-positive patients who presented with an acute abdomen.

**Results.** Thirteen patients were included. Average age was 36 years. Seven patients presented with advanced AIDS. In 10 the ileo-caecal region was affected by a chronic inflammatory process resulting in ulceration and necrosis. Intestinal tuberculosis was found in 7 patients. Despite optimal treatment more than half the study group died in hospital.

**Conclusion.** The 'acute AIDS abdomen' proved to be different in nature and prognosis than has been described previously. Intestinal tuberculosis can reasonably be suspected. Operative mortality is unacceptably high. Other treatment options are being investigated.

Disorders of the digestive tract are among the most frequent clinical problems in patients with AIDS. Progressive immunosuppression is associated with more and worse gastrointestinal pathology. A clinical dilemma arises when a patient with advanced disease presents with an acute abdomen. We examined the nature and prognosis of intra-abdominal catastrophes in such patients.

Cytomegalovirus (CMV) may cause ischaemia or infarction of bowel and occurs most commonly in the colon or distal ileum.<sup>1</sup> A high mortality rate has been reported in AIDS patients operated on for CMV ileocolitis.<sup>2</sup>

## Patients and methods

The study period was from April 2003 to December 2004. Inclusion criteria were as follows: (i) the patient was known to be HIV-positive or positive status was confirmed during admission; (ii) the patient presented with an acute abdomen, or intestinal obstruction with suspected strangulation; and (iii) laparotomy was indicated and performed.

Only patients whose clinical notes and pathological reports were available were included. The indications for surgery in patients with the 'acute AIDS abdomen' (AAA) were similar

to those in non-HIV patients. Patients who refused surgery were excluded from this analysis. All patients were resuscitated and operated on as emergencies. None was on antiretroviral therapy.

## Results

**Patients.** Thirteen patients were analysed, 6 of whom were female. The average age was 36 years. Eleven patients presented with an acute abdomen and 2 had bowel obstruction. Seven presented with advanced AIDS. Three had pulmonary tuberculosis, and all were HIV-positive.

**Operative findings.** In 10 patients the ileo-caecal region was affected by an inflammatory process resulting in ulceration and necrosis. The core finding was of a chronic necrotising inflammation affecting mainly the ileo-caecal region. A clinical term that might be appropriate for this condition is 'ileo-typhlitis'.

**Pathology.** In 7 patients tuberculous enteritis was diagnosed histologically; in 3 patients acid-fast bacilli (AFB) were observed. In another patient endothelial inclusions of CMV were observed. We suspect that sensitivity for the detection of CMV and AFB in pathology specimens was not optimal.

**Outcomes.** Despite all efforts, 7 patients died in hospital.

## Discussion

AAA is a clinical phenomenon characterised by: (i) ileo-typhlitis, i.e. a chronic necrotising inflammation of especially the ileo-cecal region; (ii) probable intestinal tuberculosis; and (iii) high mortality. It is possible that other options such as non-operative drainage should be explored. In obvious terminal patients with AAA we have employed non-operative abdominal drainage as the sole interventional procedure. We hope to publish our results in the future, but thus far can report some success in terms of survival.

Antiretroviral therapy may change the course of the condition; this study was undertaken before the South African government permitted the roll-out of anti-retroviral drugs to AIDS patients.

## REFERENCES

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2. Wexner SD, Smithy WB, Trillo C, *et al.* Emergency colectomy for cytomegalovirus ileocolitis in patients with the acquired immunodeficiency syndrome. *Dis Colon Rectum* 1988; **31**: 755-761.