Surgery in HIV Patients
Case Presentation
HIV biggest challenge facing medicine. Affects all specialities, and should not be isolated. All surgical departments are confronted with it on a daily basis. Primary goal, is to assist in the diagnosis and treatment of HIV related conditions while at the same time ensuring a good outcome after surgery in patients with HIV. Surgeons planning treatment must weigh the risks to the patient against the potential benefits of surgery.
Case Presentation

- Miss X, a 30 year old black female patient who presented to McCord hospital on 20/07/2011, was admitted to the female medical ward and found to have the following problems:
Clinical Problems

- Retro-viral disease
  - WHO stage IV
  - CD4 173
  - ARV naive
- Bilateral Bronchopneumonia
  - Commenced on empiric anti TB treatment, based on radiographic and clinical features. Sputum negative
Clinical Problems cont ...

- Acute Abdomen
  - Diagnostic laparoscopy revealed a loop of necrotic small bowel
- Fungal Septicaemia
  - With Candida Albicans
Miss X was initially admitted to the female medical ward with a one day history of abdominal pain and vomiting, she had no diarrhoea or constipation. She also had a two week history of a productive cough of whitish sputum.

Medical History

- RVD positive, CD4 173.
- Previous history of Pulmonary Tuberculosis in 2009, smear negative, treated for 6 months at McCord Hospital.

- No significant surgical history.
- No TB contacts.
The following were noted on examination at initial presentation:

- BP 154/82, P 106/min, RR 16/min
- Pyrexial with temp of 38.9
- Cervical lymphadenopathy, no oral candidiasis
- Chest: clear bilateral breath sounds, not distressed.
Abdomen: Soft, epigastric tenderness, not peritonitic, no masses palpable, no distension, and positive bowel sounds.

CVS: NAD

CNS: Orientated to time, place and person, no focal signs, no signs of meningism.
The initial assessment was that of bilateral bronchopneumonia, for which she was commenced on a course of intravenous antibiotics.

After persistent spikes in temperature and an abdominal ultrasound revealing a course spleen and minimal fluid in the abdomen she was commenced on empiric anti-tuberculosis therapy.
On day 3 of admission the surgical team was consulted as the patient’s abdominal pathology worsened.
She had not passed stool for the past 2 days, had a distended abdomen with peritonitis and was pyrexial.
She was subsequently taken for a diagnostic laparoscopy where it was found that she had some intestinal adhesions to the anterior abdominal wall with a retained loop of dead bowel.
The procedure was converted to a laparotomy in which the adhesions were dissected and the necrotic bowel resected with a primary anastamosis.

At the time an incidental finding of an uncomplicated Meckel’s diverticulum was made and resected.
The resected segment of small bowel revealed the following:

- Extensive mucosal ulceration with associated perforation and peritonitis.
- No evidence of granulomatous inflammation, fungal or parasitic infection, malignancy or other significant features.
- Both ends of resection were viable.
The patients condition did not improve post operatively as expected.
Relook laparotomy was done 2 days later.
The findings were those of an oedematous anastamosis with little through put and a picture of obstruction.
The anastamosis was redone.
Post operatively the patient was taken to the High Care Unit.

She developed an enterocutaneous fistula which was managed conservatively with TPN and gradual re-introduction of enteral feeding to which she responded well.
Initially showed a good response to anti-tuberculosis therapy.
However this response was limited.
Her respiratory problem continued to worsen.
It was thought that the patient could have developed another opportunistic infection, and a Pneumocystis pneumonia was suspected.
The patient was started on intravenous Bactrim.
A full septic screen revealed a fungal septicaemia with candida albicans cultured from her CVP tip and peripheral lines. Intravenous Fluconazole was commenced.

The timing of anti-retroviral therapy in this patient remained controversial.

Her respiratory condition continued to deteriorate despite therapeutic intervention; she developed respiratory failure and demised.
What is the role of surgery for suspected Abdominal TB?
Patients who present with suspected Abdominal TB based on ultrasound findings are treated nonsurgically and started on TB treatment empirically. The response to TB treatment is often good with early clinical improvement in patients with features of sub acute intestinal obstruction. When would we consider surgical intervention for diagnosis or treatment?
Questions

- What are the good prognostic factors for successful surgery in patients that are HIV positive, and how does the CD$_4$ count and viral load affect the outcome?
- How can surgery be used in the management of other clinical problems related to HIV?
- What are the ethical implications of refusing to operate on a patient because the risks outweigh the benefits?