

# HIV-associated non-hodgkins lymphoma of the small intestines presenting as a pelvic mass: a case report.

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Malignant tumors of the small intestines are uncommon. In this paper, an unusual case of HIV-associated non-Hodgkin's lymphoma involving the small intestine, which atypically presented both clinically and by ultrasonographic examination as a mass suspected to be a slow-leaking ectopic pregnancy, is discussed. The definitive diagnosis of small bowel malignancy was only made at laparotomy. This case serves to draw the attention of surgeons and gynaecologists to the ever-increasing possibility of HIV – associated malignancies presenting atypically as surgical or gynaecological conditions demanding a high index of suspicion for accurate diagnosis and proper management. As the incidence of HIV – associated malignancies continue to rise with the growing AIDS epidemic, it is inevitable that surgery will begin to play an increasingly major role in their management.

## Introduction

Malignant diseases have been reported in approximately 40% of patients with AIDS. Kaposi's Sarcoma and B-cell lymphomas make

up approximately 95% of these cancers<sup>1</sup>. Non-Hodgkin's Lymphoma (NHL) is the second most common after Kaposi's sarcoma, occurring in approximately 5-10% of all AIDS infected patients. It is the AIDS-defining illness in approximately 30% of new AIDS patients in the 30-40 years age-group<sup>2</sup>. The majority of patients with NHL present with extra-nodal disease involving mainly the Central Nervous System (CNS), bone marrow, and the Gastro-Intestinal Tract (GIT). However involvement of the lungs, heart, liver, gallbladder, soft-tissues and even adrenal glands by extra-nodal NHL has been reported<sup>2,3</sup>.

As the incidence of HIV-associated NHL continue to rise, and their distribution become more widespread, surgical complications associated with these malignancies are undoubtedly bound to increase. It is imperative therefore that surgeons have a high index of suspicion whenever they encounter any atypically presenting malignant tumour. In this review a case of HIV-associated NHL of the small intestine presenting with a pelvic mass and mis-diagnosed as a slow-leaking ectopic pregnancy is presented.

## Case report

A 30 year old woman was on 18/2/1999 admitted to Nakuru Maternity and Nursing Home as a case of suspected slow-leaking ectopic pregnancy for emergency laparotomy. She had a week earlier presented with a tender lower abdominal mass of recent onset. She gave no history suggestive of previous GIT bleeding and she claimed to have been in perfect health prior to the development of her presenting symptoms. A full haemogram had shown a haemoglobin of 10gms % and ultra-sonographic examination had revealed a solid mass near the right ovary. No HIV test was carried out on her at that time. Two units of blood were urgently cross-matched on admission to the hospital. At laparotomy, her reproductive organs were found to be normal. However a large tumour was found growing from mid ileum. The tumour that was solid and measuring approximately 10 cm x 6 cm had perforated but was not attached to any adjacent organs. There was massive enlargement of the adjacent mesenteric lymph nodes, but no clinically detectable peritoneal or liver metastasis. The tumour and adjacent segments of the small bowel, together with the all the clinically involved mesenteric lymph nodes was resected en block and end-to-end anastomosis of the resected bowel was carried out. Her post-operative recovery was un-eventful and she was discharged home on the 7<sup>th</sup> post-operative day. After only two outpatient attendances, she was lost to follow-up in the clinic.

Histo-pathological examination on the entire specimen revealed an intermediate malignancy, round cell, diffuses Non-Hodgkin's Lymphoma (NHL) with multiple foci in the intestines

However towards the end of October 1999, she presented to the clinic with massive ascites and respiratory distress. After counseling, a HIV test was carried out on her, which turned out to be positive. She was referred to Nakuru Provincial General Hospital where she died a few days after

admission. Her relatives refused a post-mortem examination.

## Discussion

The small intestine is relatively immune to neoplasia and small bowel malignancies are uncommon, accounting for only 1-2% of all GIT malignancies<sup>4</sup>. Small intestines lymphomas are even rarer<sup>5</sup>. Several theories have been advanced to explain this phenomenon<sup>1,4</sup>. Non-Hodgkin's lymphoma (NHL) is the second most common HIV- associated malignancy occurring in 5-10% of all AIDS patients. The majority of these lymphomas present as extra-nodal disease involving mainly the Central Nervous System (CNS), bone marrow, and the Gastro-Intestinal Tract (GIT). GIT malignancies have been reported in among other regions, the oral cavity, appendix and even the anal-rectal region<sup>2,3,7</sup>.

Involvement of the normally malignant-resistant small intestine by NHL, is an indication of the degree of HIV-induced immune suppression<sup>2,3,7</sup>, and serves to draw the attention of surgeons to the increasing likelihood of encountering more HIV-associated small bowel malignancies as the AIDS epidemic grows. This malignancy presented both clinically and by ultra-sonographic examination as a pelvic mass, which was subsequently diagnosed as a slow-leaking ectopic pregnancy. The definitive diagnosis of small bowel malignancy was only made at laparotomy.

This is very characteristic of small bowel malignancies, which are notoriously difficult to diagnose mainly due to their atypical presentation, are often advanced at the time of presentation and usually carry a poor prognosis<sup>6</sup>. A high index of suspicion therefore by the attending surgeon is the cornerstone of early diagnosis and proper management of small bowel malignancies including HIV-associated small bowel NHL.

Improved management of AIDS patients has enabled them to survive longer with impaired immune function while at the same time the AIDS epidemic has continued to grow unchecked, resulting not only in rapid increase in the incidence of AIDS-associated malignancies but also in their more widespread distribution<sup>2,3</sup>. It is inevitable therefore those surgical complications are bound to rise as these malignancies involve organs such as the liver, gall bladder, small and large intestines, appendix and the anal-rectum.

Surgeons therefore will in the near future most likely be confronted by increasing numbers of patients with HIV-associated malignancies and it is imperative that they have a high index of suspicion whenever they encounter any atypically presenting malignant tumour so as to arrive at the correct diagnosis. Surgery is expected to play an increasingly major role in the management of these patients.

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