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Chemotherapy in the management of advanced gastointestinal Non-hodgkin's lymphoma complicated with entero-cutaneous fistula: a case report

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Summary
A case of gastrointestinal non-Hodgkin's lymphoma with entero-cutaneous fistula formation following incomplete tumor resection. Patient was managed conservatively with chemotherapy viz Cyclophos phomide, Adriamycin, Vincristin and prednisolone with total healing of the abdominal wound and closure of the fistula. A case is made for conservative management of entero-cutaneous fistula complicating non- Hodgkin's lymphoma before any radical treatment is contemplated.

Keywords: *Non-Hodgkin's Lymphoma, entero-cutaneous fistula, chemotherapy*

Résumé
Un cas de lymphome gastrointestinal non-Hodgkin avec une formation de fistule entero-cutanée après une resection incomplete de tumeurs a été examiné. Le patient était ménagé de facon conservative par chémothérapie avec de la cyclophosphomide, l'adriamycine, du vincristine et le prednisolone subit une géurrisson compléte de la blessure et fermeture de la fistule. Ce cas est faite pour un ménagement conservatif de fsitule entéro-cutanee complicant le lymphome non-Hodgkin avant qu'aucun traitement radical est administré.

Introduction

Gastrointestinal tract is a common site of extra-nodal non-Hodgkin's lymphoma. [1]. Reports from various countries have shown that the incidence of gastro-intestinal non-Hodgkin's lymphoma varies from one region of the world to the other. In the Middle East, gastrointestinal NHL accounts for 46.5% of all NHL while reports from UK suggests a lower figure of about 30%[2].

In Nigeria, Afolayan and Anjorin working in Ilorin reported that GIT is the site for 17.1% of all NHLcases seen in their practice [3]. Within the GIT the small intestine accounts for about 62%of NHL while the large intestine and the stomach accounts for 19% each [4]. Histologically, Burkitt's lymphoma accounts for 42% of NHL cases and are seen predominantly in patients below the age of twenty years in the tropics. This is followed by diffuse small and large cell variants, Male: Female ratio is 4:3 and age range is between 4 and 60 years. [4].

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Patients with intestinal lymphoma are often treated with a combination of surgery, chemotherapy and radiation treatment. In patients with localized, nodular disease that is completely resected with negative suture lines, further treatment may not be necessary. In patient with bulky and diffuse disease, complete resection is unlikely to be achieved and such patients may require adjuvant treatment with chemotherapy and radiotherapy.

Intestinal perforation with fistula formation remains a major complication of adjuvant treatment in patient in which complete resection was not achieved. The case presented here had a huge abdominal disease which was incompletely resected. The patient developed entero-cutaneous fistula and was managed successfully with post-operative chemotherapy only.

Case presentation

The 24 years old student of Nigerian Polytechnic presented at a private clinic with features suggestive of intestinal obstruction of sudden onset. The doctor who saw performed an emergency laparatomy at which a huge mass (dimension not stated) was seen surrounding and constricting the small bowel. The mass was debulked and the bowel resected followed by an end to end anastomosis. The histology report of the resected mass showed diffuse large cell non-Hodgkin's lymphoma.

Immediate post-operative recovery was uneventful. However the patient present to the same hospital a month later with tumour recurrence along the laparatomy scar with associated ulceration. The patient was commenced on twice daily dressing and was then referred to Radiotherapy Department of UCH. When he was seen at UCH on the 8th of March, 1999 he was notice to be mildly febrile, anicteric and pale. There were prominent recurrent tumour growths along the laparatomy scar with extensive ulceration around the scar. There were associated multiple discrete, mobile painless nodes in the left inguinal region. Blood profile and biochemistry were normal excepting a packed cell volume (PCV) of 21%. Chest radiograph was normal. The state of the anterior abdominal wall made an ultrasound assessment difficult. Computerized tomograpic scan was not done due to patient's poor finances.

The patient was admitted into the radiotherapy ward where he had two pints of blood transfused. He was then commenced on chemotherapy using the CHOP regimen with intravenous Cyclophosphamide 1gm, vincristin1.5mg, Adriamycin 50mg and oral Prednisolone

10mg twice daily for two weeks. Each course of chemotherapy was preceded by anti-emetic usually intravenous Metochlopropomide 10mg, and intravenous Dexamethazone 8mg stat. The regimen is repeated every three weeks.

A week after the first course, the patient developed an entero-cutaneous fistula which was draining copious feacal material. The fistula must have been due to tumor lysis since the lesion was incompletely resected at the last surgery. Patient was commenced on antibiotics and low residue diets. General surgical opinion was sought and it was decided that the patient should be continued on conservative management. Radiotherapy was not considered in view of the high tendency of the fistula enlarging from fibrosis that may follow irradiation.

Chemotherapy was continued to a total of eight courses during which gradual healing of the abdominal wound occured and drainage from the fistula reduced in volume, with eventual complete wound healing and closure of fistula. The patient was discharged to continue follow up in the outpatient clinic. The patient has remained clinically stable with no evidence of recurrence and was seen at follow up in December, 2003.

Discussion

Non-Hodgkin's lymphoma is a relatively common malignancy in Nigeria accounting for 7.7% of all male cancers seen in Ibadan between 1960 and 1984.[5]. This is high compared to 3% in western countries. [5] Incidence rates are generally similar in males and females. Gastrointestinal lymphoma accounts for 6% of all GI, malignancies, but represents 17.1% of all NHL and 31%,of extra-nodal NHL respectively. [4] Because of the diffuse nature of most cases of NHL and the intrinsic chemosensitivity of the tumour cells, chemotherapy is the mainstay of its management.

However, small and well localized NHL of the GI tract may be subjected to surgical management after which follow up with serial ultrasound assessment is done [6].. However, bulky disease with residual tumour after resection may lead to intestinal perforation and resultant entero-cutaneous fistula if followed with chemotherapy and or radiotherapy. The fistula is usually as a result of tumour lysis following treatment, however, in the absence of treatment disease progression might lead to fistula formation.

Entero-cutaneous fistula formation should not be regarded as a major catastrophe that may necessitate further surgical intervention. Our experience with the above case showed that conservative management with continued chemotherapy may be treatment of choice. Though, intestinal fistulation is not an everyday event, further observation will be require to further define the role of chemotherapy in this rare condition.

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