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Colon Carcinoma Co-existing With Pulmonary Tuberculosis

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SUMMARY

We report a case of adenocarcinoma of mid-transverse colon co-existing with pulmonary tuberculosis (PTB) successfully treated with a combined anti-tuberculosis and anti-cancer chemotherapy after surgery. Histology confirmed mass as moderately differentiated Duke's stage C adenocarcinoma. The patient who presented with intestinal obstruction developed cough five days post-operatively and progress deteriorated. A chest radiograph confirmed pulmonary tuberculosis. Patient then received short course chemotherapy for the PTB and anti-cancer chemotherapy for the adenocarcinoma concomitantly. Patient thereafter did well until discharge at the completion of treatment.

Key words: Colon adenocarcinoma, pulmonary tuberculosis, and concomitant anti TB and anti cancer chemotherapy**INTRODUCTION**

Reports from Europe and US suggest that cancer of the colon is commoner in older individuals, 50 years upwards. In Nigeria, the average age is below 50 years.

Intestinal tuberculosis occurring together with colorectal cancer is uncommon. [1] The authors are not aware of any previous report of colon cancer coexisting with pulmonary tuberculosis in any of the international or local journals available to them.

We report here, a case of transverse colon cancer coexisting with pulmonary tuberculosis in a 40-year-old male teacher.

CASE REPORT

Mr. M. A., a 40 year secondary school prinicpall, presented with signs and symptoms of intestinal obstruction. He has received treatment for epigastric discomfort and duodenal ulcer was querried for about 2 years. Abdominal ultrasound showed a lumen - constricting colon mass. Barium enema showed narrowing of the lumen of the distal segment of the transverse colon with shouldering defect and mucosal destruction. These changes were consistent with carcinoma of the colon (Fig. 1a, 1b). Results of laboratory investigations were essentially normal except for raised erythrocytes sedimentation rate (ESR).

Patient had exploratory laparotomy and the operative findings were as follows:
Constricting intramural mass of the transverse colon 8 cm from the splenic flexure, enlarged lymph nodes at the root of the mesentery, inflamed appendix (12 cm long)
A bloc resection of about 15 cm of the transverse colon with the involved lymph nodes was done and continuity of the lumen re-established. A flatus tube was passed intraluminally beyond the level of the anastomosis. An Appendicectomy was also carried out, followed by a thorough abdominal lavage with about 2 litres of normal saline and introduction of 500mg metronidazol into the abdomen before wound closure. Broad spectrum antibiotics were given for 5 days postoperatively.

The patient opened his bowel on the 3rd day postoperatively and the flatus tube was removed by the 4th day. By the fifth postoperative day, the patient complained of cough and inability to feed well.

Postoperative chest x-ray revealed patchy opacities and streaky shadowing with cavitary lesions in the right and the left mid and lower lung zones, as well as calcified hilar nodes in both hila. These changes are in keeping with chronic active pulmonary tuberculosis (Fig. 2). Serology confirmed active pulmonary tuberculosis.

Anti-koch's treatment (Directly Observed Treatment Shortcourse-DOTS) with Rifampicin, Isoniazide, Ethambutol and Pyrazinamide was commenced, pending the outcome of the histology examination of the resected colon. The patient improved soon after the first dose with hope that the colonic tumour was also tuberculous in nature. The wound healed primarily. However surprisingly, the histology report two weeks later revealed a moderately differentiated adenocarcinoma with spread to the mesenteric lymph nodes (Duke's stage C). The appendix had widened lymph follicles.

The patient subsequently received eight courses of anticancer chemotherapy, which included 5-flourouracil, methotrexate and Cyclophosphamide two-weekly, but was discharged three weeks after surgery in good general condition. He completed both the anti cancer and the anti TB chemotherapy on outpatient basis concurrently. Adjuvant therapy included vitamins and good nutrition.

Patient has been on follow up for the past two years and has remained in good health.

DISCUSSION:

Though there are reports in the literature of intestinal tuberculosis co-existing with cancer of the colon, [1] the authors are not aware of any report of pulmonary tuberculosis co-existing with colon cancer in all the literature available to them. One report was that of early stage adenocarcinoma occurring with intestinal tuberculosis. The tuberculosis was treated with chemotherapy while the colonic cancer was only widely resected. It was said that the 5-year survival rate was good. In the case under review, the cancer was already in an advanced stage of Duke's stage C and the only reasonable option in our circumstance was a combination therapy with anti-cancer and anti-kochs chemotherapy. [4,5] The concomitant treatment of both pathologies in our case produced good result.

Colonic resection and primary anastomosis without a vent in an emergency is not always advisable for fear of anastomotic leakage and possible peritonitis. [2,3] However, in our surgical unit, flatus tube passed under guide intraoperatively has been successfully used severally without complications.

Tuberculosis infection is common in developing countries like Nigeria where the annual risk of infection is between 1.5-2.5%. [6] Tuberculosis disease is commoner in lower income earners where there is low immunity due to poor nutrition and over crowding amongst other risk factors. Our patient is a school principal with a relatively good nutritional status on presentation. The double stress of cancer and surgical intervention might have lowered immunity and re-activated the latent tuberculosis. [7] His quick recovery might be associated with his good nutritional status.

Though stress ulcer is common in managers of institutions, epigastric discomfort, closely associated with it, can be misleading at times. The case under review received antacids for upwards of 2 years for a queried duodenal ulcer without relief of symptoms. His teaching profession might have made the doctors believe that he might be suffering from stress related ailment associated with present day school children's indiscipline (e.g. cultism), and bad attitude to work (such as absenteeism and sexual harassment of female school children) of some teachers. It is also important to make all information about all kinds of medical interventions (treatment modalities) available to all classes of patients (whether poor or rich). The relative poverty level of teachers of his grade might have made the doctors not request for investigations such as gastro-duodenoscopy, which is however, only available about 60 kilometres away from our centre. There was no indication that the previous health managers discussed any form of investigations to ascertain the actual cause of the refractory upper abdominal discomfort.

Fig. 1a & b: Barium Enema showing obstruction of the mid-transverse colon

Note: *Narrowing of the Lumen with shouldering defect and mucosal destruction*

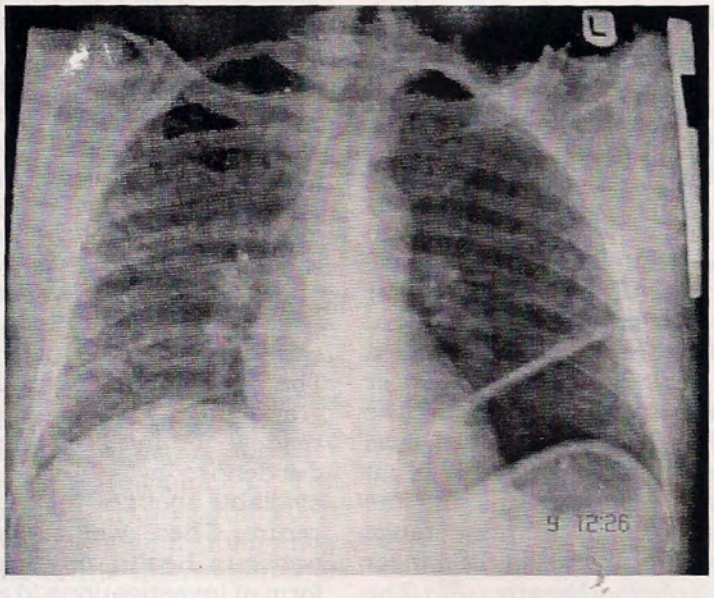

Fig. 2: CXR of patient showing mid and lower lung zone patchy opacities and streaky shadowing with cavitations in both lungs.

Note: Calcified hila lymph nodes

CONCLUSION

This report shows that survival following concomitant treatment with both anti-kochs and anti-cancer chemotherapy for co-existing late stage adenocarcinoma of the colon and pulmonary tuberculosis is good.

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