

ANO-RECTAL TUBERCULOUS GRANULOMA PRESENTING WITH FAECAL INCONTINENCE

*PO Okokhere, ** EF Alufohai, **CE Iyamu, **J Kpolugbo, *HO Omeife, **A Dongo
Departments of *Medicine and **Surgery, College of Medicine, Ambrose Ali University, Ekpoma

ABSTRACT

Tuberculosis is a common condition world-wide but more so in developing countries where it accounts for 95% of all cases. It primarily affects the respiratory system, but other systems including the gastro-intestinal tract can also be affected. When it does, it has predilection for the ileo-caecal region, where half of the cases occur. Ano-rectal tuberculosis is not very common and when it occurs, it could present as a mass, making it difficult to differentiate from malignancy and other granulomatous lesions. We therefore, present a case of a 68-year old man with a huge mass in the ano-rectum with faecal incontinence, which was clinically diagnosed as an advanced carcinoma of the ano-rectum for which the biopsy was reported as tuberculosis. He improved with anti-tuberculosis treatment.

Key Words: Ano-rectum, tuberculosis, cancer.

(Accepted 2 December 2008)

INTRODUCTION

Tuberculosis is an important cause of morbidity and mortality especially in the developing world where it affects the economic age group of 15-55 years and where 95% of all cases are also seen^{1,2}. Although any system in the body can be affected, including the gastro-intestinal tract², it has been shown to be relatively uncommon in the ano-rectal region^{1,2,3}. In the gastro-intestinal tract, three types are grossly identified viz: the ulcerative, hypertrophic and the ulcero-hypertrophic¹. The later two commonly give rise to a mass in the gastro-intestinal tract. Where it presents as a colo-rectal mass, it may be difficult to differentiate from carcinoma or other granulomatous lesions such as schistosomiasis and amoebiasis; which are also common in the tropics using clinical, endoscopic or radiological parameters^{3,4,5,6}. In the ano-rectal region, it commonly presents as tuberculous proctitis or fistula-in-ano, so, tuberculous mass in the ano-rectum is not a very common condition hence there is a low index of suspicion^{4,7,8}. Diagnosis is therefore, hedged on histology report of the biopsied specimen; and when established responds impressively to conservative treatment with anti-tuberculous drugs⁹. However, it must be stated that colo-rectal malignancy can co-exist with tuberculosis especially where the incidence of the later is high as is currently seen in the developing world with many immuno-compromised individuals^{9,10}.

CASE REPORT

Mr. I. S. a 68-year old pensioner, presented to our

hospital, Irrua Specialist Teaching Hospital (ISTH) Irrua, Edo State, Nigeria; with a 9-month history of a discharging peri-anal sinus for which he was applying some herbs and patent medicines. At the time of presentation, he had developed an exuberant ano-rectal mass with faeco-purulent discharge. There were intermittent low grade fever and appreciable weight loss. There was no history of chronic cough or alternating constipation and diarrhea or the passage of blood and or mucus antedating the onset of presenting symptoms. Assessment revealed a pale elderly man, afebrile with temperature of 37°C. His weight was 50kg and the blood pressure 110/70. The chest was clinically clear and no significant findings on abdominal examination. Per rectal examination showed very dirty perineum smeared with faeces with a huge, ragged ano-rectal mass which bled easily on contact, with loss of sphinderic tone. It extended proximally to about 6cm from the ano-rectal verge. A diagnosis of advanced ano-rectal malignancy was therefore, made and investigations requested. The results showed a PCV of 20%, ESR >150mm/hr. Stool microscopy showed few pus cells and red blood cells with no ova or cyst seen. Barium enema was reported as showing irregularity of the left lateral and posterior rectal walls with multiple recto-cutaneous fistulae highly suggestive of ano-rectal malignancy. (Fig 1) In view of the anal incontinence, and soilage noticed clinically, patient was prepared for a temporary colostomy as well as a biopsy of the mass in the hope of administering cytotoxic drugs for some weeks in anticipation of downgrading the tumour to the extent of offering an abdomino-perineal excision of the mass. Sigmoid colostomy was therefore, done and biopsy taken. Histopathology report of the Biopsy

Correspondence: Dr EF Alufohai
Email: ewanprof@yahoo.com

Showed a granulomatous lesion consisting of central areas of necrosis surrounded by lymphocytes, epitheloid cells, fibroblasts and Langhan's giant cells, features consistent with tuberculosis. No features of malignancy were seen (Fig. 2). Thereafter, patient was screened for retroviral infection, which was reported to be negative. He was then referred to the medical team for anti-tuberculous therapy. After the initial 8 weeks of intensive phase treatment with 4 anti-tuberculous drugs viz: Isoniazid 5mg/kg body weight, Rifampicin 10mg/kg, Pyrazimide 25mg/kg and Ethambutol 15mg/kg daily. Patient showed good response to treatment at the end of 8 weeks as evidenced by disappearance of fever, weight gain of 2 kg, improved well being and impressive diminution of the ano-rectal swelling. After completion of his treatment, his colostomy was closed 8 months later when he regained his anal continence assessed digitally and ability to retain 250ml of fluid instilled by enema. He has been doing well about 2 years after colostomy closure.

DISCUSSION

Ano-rectal tuberculosis is relatively uncommon and accounts for less than 2% of gastro-intestinal cases^{1,2}. Gastro-intestinal infection by tubercle bacilli results mainly from a primary pulmonary lesion either through swallowing of infected sputum or through tonsillar infection¹. In the index case, there was no history of chronic cough or contact with persons with chronic cough. The bovine specie is also a common cause of gastro-intestinal infection from drinking unpasteurised milk. The history of unpasteurised milk consumption was not obtained. The clinical presentation of ano-rectal tuberculosis, include: rectal bleeding, weight loss, peri-anal discharges, diarrhea, constipation and a mass^{4,8}. Our patient at the time of presentation had ano-rectal mass, weight loss and anaemia in addition to faecal incontinence and a short history, all of which tended to favour a malignant condition, which was the working diagnosis. The radiological report also supported the clinical diagnosis confirming that this condition can be missed if reliance is placed on clinical, endoscopic and radiological findings only⁴. The diagnosis can only be settled by histopathological report, which was the situation in our case.

The impressive response to anti-tuberculous therapy, and the complete recovery of our case, further emphasises the need to have a high index of suspicion of tuberculosis in a colo-rectal mass⁸. This is moreso, as the incidence of tuberculosis is increasing in the face of increasing cases of immuno-compromised individual(s) when the condition may become rife in unusual sites as the case presented^{9,10}.

Our patient was not immuno-compromised. It must also be borne in mind that tuberculosis of the colo-rectal region could co-exist with a malignant lesion emphasizing the need for biopsies to clinch the diagnosis¹⁰.

REFERENCES

1. **Archampong EO, Tandoh JFK, Nwako FA, da Rocha Afodu JT, et al.** Abdominal tuberculosis IN: Principles and Practice of Surgery including Pathology in the Tropics 3rd Ed. Publ; Ghana Publishing Co. Tema 2000, p. 627 629.
2. **Bremmer CG.** Anorectal Disease in the South African Bantu. S. Afr. J. Surg; 1964, 2, 147.
3. **Sahoo D, Mahapatra MK, Salim S.** Rectal Tuberculosis; a rare case. Trop. Gastroenterol. 2004, 25 (2): 84 5.
4. **Puri AS, Vij JC, Kumar N.** Diagnosis and Outcome of Isolated Rectal Tuberculosis. Indian J. Surg. 1992; 54: 93 94.
5. **Kolawole TM, Lewis EA.** A Radiological Study of Tuberculosis of the Abdomen (Gastrointestinal Tract) Am. J. Radiol.; 1975, 123, 348.
6. **Leonidas GK, Jeffery IS.** Tuberculosis presenting as a Perianal mass: Report of a Case. Dis. Colon Rectum 2000, 43 (11) 1604 1605.
7. **Abrams JS, Holden WD.** Tuberculosis of Gastro Intestinal Tract. Arch Surg. 1964; 89:282 92.
8. **Gupta OP, Dube MK.** Tuberculosis of Gastrointestinal Tract: with Special Reference to Rectal Tuberculosis. Indian J. Med. Res. 1970; 58:979 84.
9. **Lax JD, Haroutidonian G, Attia A, Rodriguez R, Thayaparan R, Bashist B, et al.** Tuberculosis in a Patient with the acquired Immune Deficiency Syndrome: Report of a Case. Dis Colon Rectum; 1988, 31, 394.
10. **Josh MA, Gore MA, Nadkarni SP.** Tuberculosis of Rectum with Adenocarcinoma. Arare case. Indian J. Surgery 1992; 54:93 94.