

# A case of multiple (seven external openings) tubercular anal fistulae

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**Abstract-** We report a case of multiple fistulae in ano [ 7 external openings] in a 52 yrs-old man, who had a history of episodes of pain and pus discharge from openings around the anus since 4 years.

**Biopsy from the tract of one of the fistula confirmed tubercular infection. He underwent anti-tubercular treatment, which resulted in complete resolution and healing.**

**Key Words:** Anal fistula, Tuberculosis, Perianal suppuration, Anal cryptitis, Etiology.

Anal tuberculosis is not an uncommon pathology found in the tropics<sup>1</sup>. Ano-perianal tuberculosis may be associated with abdominal tuberculosis either as an extension of the original lesion or due to its spread via the lymphatics. However, with the advent of effective anti tuberculous chemotherapy, the incidence is becoming distinctly less<sup>2</sup>. We describe a case of multiple anal fistulae in a 52- year-old male with a tubercular infection of the perianal region leading to anal fistulae.

## Case Report

A 52-years-man reported with complaint of re peated episodes of pain, swelling and pus dis- charge from around the anus. He was treated several times in the past at different hospitals for a perianal swelling thought to be an abscess. Managed conservatively on every occasion.

The treatment often resulted in arresting the symptoms for the time being but would recur after few weeks at newer places around the anus with the similar symptoms and presenta- tions.

There were no complaints of abdominal pain or frequent stools. There was no history of passing mucus or blood per rectum. There was no history of the patient undergoing any other surgical procedure or of suffering from any major illness in the past. There was no history of TB in the family.

On clinical examination, the patient looked comfortable. Abdominal examination was nor- mal.

Ano-rectal examination revealed seven pus- discharging openings around posterior midline of the anus with gross induration but minimum tenderness. There was no extension of the le- sion in either of the ischio-rectal fossa. One internal opening into the rectum could be located (Figure 1).

## Illustration 1

On rectal digitation, the anal sphincter tone was found adequate with no signs of any mass in the anal canal. The ano-rectal wall around the posterior midline was indurated.

The anosopic examination revealed a crater at the dentate line at 6 'O clock position, which when compressed, expressed a bid of pus from the openings.

Haematological tests reported a rise in the leukocyte count with predominance of poly- morphs and lymphocytes. The platelet count was normal, and the Erythrocyte Sedimenta- tion Rate was 64mm. The culture of the dis- charge from the opening show klebsiella pneumonie bacterial growth. The chest radiograph and Mantoux test were normal.

Biopsy was taken under local anaesthesia from one of the tracts. The histopathological examination of the tract tissue indicated granulomatous inflammation with presence of caseating granuloma, lymphocytes, epitheloid cells and Langhans' giant cells.

Tissue sample was also sent for Xpert MTB gene assay which was positive. Patient was started on Antitubercular therapy and discharged. Patient is being regularly followed up in OPD at regular intervals and patients has complete resolution of symptoms and all fistula without any active pus discharge or complaint of pain. Patient is in good general health and symptomless



Figure 1. Multiple anal fistulae in the posterior part of the perianal region

### Discussion

Anal fistulae are said to arise from crypto glandular infection of the anal glands, which lie within the inter sphincteric space<sup>3</sup>. This infection then proceeds to a perianal abscess and subsequent fistula formation. The type and virulence of the micro-organism responsible may determine whether an anal fistula develops<sup>4</sup>.

Though tuberculosis of the gastro-intestinal tract is frequently encountered in tropical countries, tuberculosis of bowel distal to ileocaecal junction is rare in developed countries and is rarely considered as a differential diagnosis of proctological disorders<sup>5</sup>. Tuberculosis of gastrointestinal tract may be primary or secondary to a primary focus

elsewhere<sup>6</sup>. Primary intestinal tuberculosis is attributable to bovine tubercle bacilli entering the system through milk intake.

While the rate of patients with extra pulmonary tuberculosis has increased globally in the last few years (about 5% of all cases) with display of a wide spectrum of its clinical manifestations, the anal localisation still is a rare occurrence (0.7%) according to available published data<sup>7</sup>.

The possible cause of presence of multiple fistulae in this patient could be attributed to the negligence of episodes of developing peri-anal abscesses, followed by crypto-glandular infection, which were allowed to burst open on their own. There should be a strong clinical suspicion of tuberculosis in endemic areas with such presentations as *Mycobacterium* is one of the causes of granulomatous diseases within the anorectal region. Clinical diagnosis is usually dependent on microscopic detection using Ziehl-Nielsen stain and mycobacterial culture, but the sensitivity and specificity of these two methods are low<sup>8</sup>. As anal tuberculosis is rarely diagnosed correctly before operation on the basis of the clinical picture, the histo-pathological examination of the tract of the fistula is mandatory for the correct diagnosis of anal tuberculosis<sup>9</sup>.

Few other reported causes of multiple anal fistulae include hidradinitis suppurativa, actinomycosis, Bartholinitis, radiation injuries, lymphoma, and organised abscess<sup>10</sup>.

It is estimated that about 45% patients with perianal abscess are destined to develop anal fistula<sup>11</sup>. The treatment modalities of anal fistula includes fistulectomy, use of setons<sup>12</sup>, and fibrinsealant<sup>13</sup>, but we preferred conservative approach for this patient which includes putting patient on anti-tubercular treatment for the same.

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