INTRODUCTION

Pakistan ranks sixth in the world in terms of tuberculosis (TB) burden, with an estimated incidence of 181 per 100000, or 286000 new cases annually.¹ Majorit of the cases present either as pulmonary, abdominal or cervical tuberculosis. Although it is described as one of the cause of granulomatous diseases within the anorectal region,² yet perianal TB, without the presence of any previous or active pulmonary infection, is extremely rare.³ Resurgence in tuberculosis during the HIV era produces a new spectrum of presentations for the surgeon⁴ and, therefore, invasion by tubercle bacilli is often seen at unusual sites of the gut and reported in literature.⁵ The distinct features, which include anal pain or discharge, multiple or recurrent fistulae-in-ano and inguinal lymphadenopathy, are not characteristically distinct from other anal lesions. Undiagnosed cases are associated with high recurrence rates. Due to the varied presentation of anal TB, it should be suspected in all lesions not responding to the conventional approaches. All such recurrent or complex fistulae i.e. those with more than one external opening should undergo histopathological examination to exclude tuberculosis. When confirmed, the treatment options are surgical for the suppuration and medical for the tuberculosis.

The purpose of this study was, therefore, to determine the frequency of tubercular fistulae-in-ano in recurrent or complex fistula, with no evidence of tuberculous foci elsewhere in the body and not responding to conventional surgical treatment.

PATIENTS AND METHODS

This study was carried out at the Surgical Ward-3, Jinnah Postgraduate Medical Centre, Karachi, from 1998 to 2007. on 100 patients, admitted through surgical OPD with signs and symptoms suggestive of recurrent fistula-in-ano, not responding to conventional surgical treatment i.e. fistulectomy and developed recurrence within 3 months. Those with diabetes mellitus, bleeding disorders, age below 12 years and evidence of pulmonary or systemic tuberculosis were excluded from this study. Type of fistula, low or high, site of fistula, anterior or posterior, number of fistulas, number of external opening, nature of margins and distance from...
the anus were noted in all cases. A fistulogram was performed in all the patients. All patients underwent standard fistulectomy and the resected specimen was sent for histopathological evaluation of tuberculosis. After confirmation of the disease, antituberculous treatment was started immediately. For at least six months after commencement of anti-tuberculous treatment, responses like decrease in the discharge and closure of the fistulae were observed. All these observations were recorded on the prescribed proforma. Descriptive statistics in terms of frequency and proportions were used.

RESULTS

Out of the 100 patients, the majority were males (92%). The median age was 35 years ranging from 15-65 years. Biopsy revealed non-specific inflammation in majority of the cases. Only in 11 patients, the diagnosis turned out to be tubercular fistula-in-ano. All of the fistulas were low type, single in number and mostly located posteriorly, usually within 3 cms of anal verge. In one case of fistula, due to non specific inflammation, the external openings were multiple. Table I shows the comparative statistics of tubercular fistulas with fistulas due to non-specific inflammation. There were no significant major difference regarding age, gender, type, site, number, external openings and distance from the anus. Fistulogram revealed single internal opening in all the tuberculosis cases. However, in only one case of non-specific inflammation, external openings were multiple. These patients were then kept under follow-up for at least 6 months and in all cases complete healing within 6 months after the start of antituberculous treatment was observed.

DISCUSSION

Gastrointestinal tuberculosis represents 1% of extrapulmonary tuberculosis and only sporadic cases of anal tuberculosis have been reported in the literature. Tuberculosis is a neglected cause of anal sepsis. Often it is not recognized and, therefore, is not treated properly. This results in recurrence of fistulas after routine surgical treatment.

The clinical features of anal tuberculosis, which include anal pain or discharge, multiple or recurrent fistulae-in-ano and inguinal lymphadenopathy are not characteristically distinct from other anal lesions.

Similarly in this study, there was no characteristic clinical picture for tuberculous fistulae-in-ano. This series showed that there was no difference in the clinical picture including age and gender distribution and clinical features of anal lesions between the 11 cases of tubercular fistula-in-ano or 89 cases of non-tubercular fistula-in-ano. In one case of non-specific inflammation fistulas, external openings were multiple. A case reported by Gupta, showed multiple (eight) external openings in tubercular anal fistulae with evidence of tuberculosis in one of the tracts. Therefore, it seems that histological examination of the excised fistula is mandatory for the diagnosis of anal tuberculosis. However, the histological differential diagnosis of as excised fistula-in-ano are not invariably subjected to histopathological examination, it may also be agreed that some cases of tubercular fistula-in-ano are missed and the incidence of anal or perianal tuberculosis may not be as low as reported in literature. As excised fistula-in-ano are not invariably subjected to histopathological examination, it may also be agreed that some cases of tubercular fistula-in-ano are missed and the incidence of anal or perianal tuberculosis may not be as low as reported in literature. However, non-recurrent fistulas may also be tuberculous. So, to prevent recurrence, all fistulas should be sent for histology. It is also concluded that a tuberculous origin must be considered when the cause of perianal lesion is unclear to avoid undesirable delay in the diagnosis and treatment.

The main differential for gastrointestinal tuberculosis remains the Crohn’s disease. Crohn’s disease is a debilitating expensive disease that is growing in incidence in both developing and developed countries. Clinical manifestations varies from asymptomatic skin tags to severe, debilitating perineal destruction and sepsis. However, the histological differential diagnosis of Crohn’s disease and intestinal tuberculosis can be very challenging, as both are chronic granulomatous disorders with overlapping histological features. In this study, none of the biopsy reports showed the evidence of Crohn’s disease or malignancy. This may be explained by the fact that malignancy is already diagnosed because of its clinical features before the development of fistulous communications at a later
stage. So, biopsy is seldom required in such patients and fistulae usually assumed as their sequel. Similarly, Crohn’s disease is not common in this country, therefore, none of the patients were diagnosed with this disease in the biopsy reports.

Although abdominal and pulmonary tuberculosis is commoner in women, but in this study, none of the resected specimens from the females showed evidence of tuberculosis. This reversal of the gender incidence is difficult to explain unless it is a simple reflection of a generally increased incidence of fistula-in-ano in males compared to females in most series.

In some cases, pulmonary or other tuberculosis is accompanied with anal tuberculosis. However, in this study, all of these fistulas were primary and there was no evidence of any underlying systemic or gastrointestinal causative factor. So, it further confirms that isolated perianal tuberculosis can occur in the absence of any tuberculous foci elsewhere in the body. Therefore, it further concludes that primary tuberculosis of the perianal region should always be kept in mind when encountering a case of recurrent fistulae or multiple fistulae not healing despite conventional surgical treatment.

The treatment is two-fold in such patients of tubercular anal fistulas i.e. surgical for the suppuration and medical for the tuberculosis. Therefore, a good response was seen when healing occurred in all the cases of tuberculous fistulae-in-ano, after anti-tuberculous treatment was started, following fistulectomy. Response to anti-tubercular chemotherapy is uniformly good, and surgery is seldom required in these patients, as shown in literature in such cases of perianal tuberculosis. Recurrences are unusual after the start of anti-tuberculous therapy. Therefore, an early diagnosis is a must in such patients to prevent recurrences as well as further surgeries of such an easily curable disease.

CONCLUSION

Tuberculosis was responsible for 11% cases in recurrent fistula-in-ano responding standard surgery. Anti-tuberculous therapy led to healing within 06 months. A tubercular fistula-in-ano is seldom diagnosed pre-operatively on the basis of clinical picture. Therefore, in all cases of recurrent fistula-in-ano, histopathological examination of the excised fistula is mandatory and once tuberculosis is confirmed, antituberculous treatment should be immediately started to ensure early healing and cure of the disease.

REFERENCES