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Case Report

A case of anterior abdominal wall tuberculosis

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ABSTRACT

A rare case of a middle-aged woman who presented to our emergency department with a huge swelling over lower part of abdomen for 3 years that was associated with continuous purulent foul-smelling discharge from multiple sites over swelling for past 2 years and all her past history was irrelevant except for her significant loss of weight for 6 months and unable to ambulate due to huge swelling for 6 months. She is known diabetes mellitus type 2 for 6 years on oral hypoglycemic drugs. On examination she had stable vital signs, mild pallor, a large globular swelling of about grossly 30×30×20 cm extending from 2 cm below umbilicus superiorly till pubic symphysis inferiorly, bilaterally extending till anterior superior iliac spine, flanks not full, multiple dilated veins over skin. Multiple foul smelling pus discharging sinuses, prominence on leg raise test and absent cough impulse, rest of the abdomen is soft and non-tender with no organomegaly and present bowel sounds. Bilateral inguinal group of lymph nodes were palpable and matted. Swelling was exclusive extra peritoneal on computed tomography (CT) scan. Excision of swelling was done up to anterior rectus raw area open wound with bilateral inguinal lymph node excision was under general anesthesia was done. Histopathology showed granuloma with caseating necrosis from lymph nodes. Anti-tuberculosis therapy intensive phase was started post operative wound was healthy, and after 6 weeks of initiation of anti-tubercular treatment wound was closed with secondary suturing.

Keywords: Anterior abdominal wall tuberculosis, Extrapulmonary tuberculosis, ATT, Mass per abdomen

INTRODUCTION

Extrapulmonary tuberculosis (EPTB) is isolated occurrence of tuberculosis (TB) at body sites other than lung. EPTB prevalence is 15-20% of all patients with tuberculosis.[3] Musculoskeletal tuberculosis occurs in 1-3% of patients with tuberculosis.[1] Abdominal wall tuberculosis per se is very rare and an autopsy study have shown abdominal wall involvement in less than 1% of patient who died of tuberculosis.[2] We report a case of anterior abdominal wall tuberculosis which presented as a vague abdominal mass and its management at our center.

CASE REPORT

Symptoms

A 40-year lady presented to emergency department with complaints of gradually progressive painless swelling over lower part of abdomen for 3 years associated with continuous purulent foul-smelling discharge from multiple sinuses over swelling for past 2 years with loss of weight for 6 months. She is diabetic for 6 years on oral hypoglycemic drugs.

Physical examination

A large globular swelling grossly 30×30×20 cm extending from 2 cm below umbilicus superiorly till pubic symphysis inferiorly, bilaterally extending till anterior superior iliac spine, multiple dilated veins over skin.

Multiple foul smelling pus discharging sinuses, it was prominent on leg raise test and absent cough impulse, rest of the abdomen was soft and non-tender with no organomegaly and audible bowel sounds. Bilateral inguinal group of lymph nodes were palpable. Swelling was exclusive extra peritoneal on CT scan.

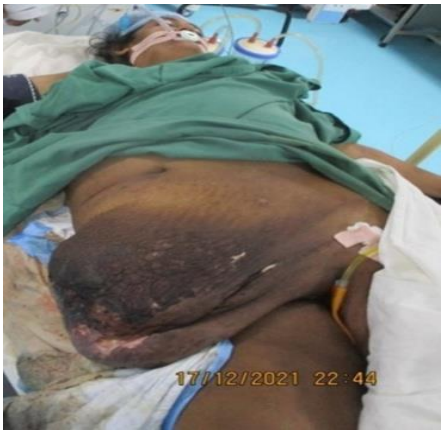

Figure 1: Mass at the time of presentation.

Figure 2: Mass after complete resection.

In-hospital course

Patient was immediately for operation where excision of swelling was done up to anterior rectus, raw area was left as an open wound with bilateral inguinal lymph node disection under general anesthesia Figures 1 and 2.

She was put on empirical broad spectrum antibiotic 2nd generation cephalosporin and metronidazole. Meanwhile microbiological tests Genexpert, MTb Rif, Zn staining were sent and reported as no evidence of tuberculosis. Clinical diagnosis of extrapulmonary tuberculosis was made as histopathology showed granuloma with caseating necrosis with langhans giant cells. Weight based anti-tuberculosis therapy intensive phase was started and advised to follow up.

Follow up

After initiation of ATT and appropriate nutrition. She was in regular follow up initially twice weekly for first 2 weeks, then once a week for 4 weeks, post operative wound was healthy and after 6 weeks of initiation of anti-tubercular treatment wound was closed with secondary suturing.

DISCUSSION

Anterior abdominal wall tuberculosis is though very rare.

History regarding contact to a patient with tuberculosis to be ruled out. The spread to anterior abdominal wall may be hematogenous or via locoregional lymph nodes.

In our case loco regional lymph nodes i.e.; inguinal lymph nodes which were sent for histopathology confirmed caseating granulomas with langhans gaint cells pathognomic of tuberculosis.

When a rare anatomical site is suspected tuberculosis is always to be considered as one among the differential diagnosis. Diagnostic tools for clinical or microbiological confirmation of tuberculosis will aid in isolation of the disease and its definite management.

CONCLUSION

Incidence of pulmonary tuberculosis is high but extra pulmonary tuberculosis is gradually increasing.[3] In 2021, Gurgaon, India a case was reported which involved parietal abdominal wall muscles initial USG guided and CT guided aspirate sent for microbiological confirmation of tuberculosis.[2] Either microbiological or clinical evidence of tuberculosis is sufficient for initiation of ATT.[3] For a long standing disease a differential diagnosis of extrapulmonary tuberculosis though rare need to be considered. Keeping wounds clean and debriding them thoroughly, diagnosing tuberculosis early and initiating weight-based antitubercular therapy as soon as the diagnosis has been confirmed based on microbiological or clinical diagnoses, is the key. After treatment is initiated, patient compliance is also important.

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