

A RETROSPECTIVE ANALYSIS OF EXTRAPULMONARY TUBERCULOSIS PATIENTS WITH INVOLVEMENT OF DIFFERENT ANATOMICAL SITES ATTENDING TERTIARY CARE CENTRE



Medicine

DR. Ravinuthala Purnima*	Resident, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra. *Corresponding Author
Dr. Hafiz Deshmukh	Assistant Professor, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra.
Dr. Ashish Deshmukh	HOD And Professor, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra.
Dr. Sunil Jadhav	Associate Professor, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra.
Dr. Shiv Prasad Kasat	Assistant Professor, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra.
Dr. Robin Varughese John	Resident, Department of Respiratory Medicine, Mahatma Gandhi Missions Medical College And Hospital, Aurangabad, Maharashtra.

ABSTRACT

OBJECTIVE: To assess the number of new cases of Extrapulmonary tuberculosis, by characterizing patients based on anatomical site.

METHODS: This is a retrospective, descriptive study of diagnosed patients of EPTB of all age groups and was conducted in the MGM medical college and hospital, Aurangabad, a tertiary care hospital. Data for this study was obtained from JAN 2018 to DEC 2020.

RESULTS: This study showed that out of all EPTB cases, the incidence of Lymph node T.B is higher followed by Pleural T.B. The incidence of EPTB is higher in younger population.

CONCLUSION: Our study points out the population which is at higher risk of EPTB. Since diagnosing EPTB is difficult as the samples taken from the affected organs are paucibacillary giving rise to higher chance of misdiagnosing such patients. A strong clinical suspicion plays a crucial role in the early diagnosis and treatment of such patients.

KEYWORDS

INTRODUCTION

Extrapulmonary tuberculosis (EPTB) describes the various conditions caused by Mycobacterium tuberculosis infection of organs or tissues outside the lungs. There are many forms of EPTB, affecting every organ system in the body. Some forms, such as Tubercular meningitis and Tubercular pericarditis, are life-threatening, while others such as pleural tuberculosis and spinal tuberculosis, lymph nodes, abdomen, genitourinary tract, skin, joints and bones can cause significant ill-health and lasting disability. The most common EPTB is Lymph node followed by pleural Tuberculosis and in decreasing order of sites were abdomen, bones and joints, skin and muscles and genitourinary tuberculosis (1,2,3). The burden of EPTB is high ranging from 15-20 per cent of all tuberculosis cases in HIV-negative patients, while in HIV-positive people, it accounts for 40-50 per cent of new TB cases (4). Young age, female gender, Asian and African origin, and human immunodeficiency virus (HIV) infection are independent risk factors for EPTB (5). The symptoms and signs generally relate specifically to the affected organ system. Diagnosis of EPTB is done as per RNTCP guidelines which is based on one culture positive specimen from extrapulmonary site or histopathological evidence or strong clinical evidence consistent with active EPTB disease followed by medical officers decision to treat with a full course of anti-TB therapy under DOTS. (6) Xpert MTB/RIF is a commercially available diagnostic test for *M. tuberculosis* complex (MTB), which uses polymerase chain reaction (PCR) to test specimens for genetic material specific to MTB, and simultaneously detects a gene which confers resistance to rifampicin, *rpoB*. Extrapulmonary tuberculosis is associated with lower bacillary burdens than pulmonary disease; therefore, extrapulmonary disease can generally be treated with standard short-course regimens that are effective for pulmonary disease.

OBJECTIVES:

To assess the number of new cases of extrapulmonary tuberculosis, by characterizing patients based on anatomical site.

INCLUSION AND EXCLUSION CRITERIA:

INCLUSION CRITERIA:

All suspected EPTB patients attending various department OPD in MGM hospital, Aurangabad.

EXCLUSION CRITERIA:

- Patients with diagnosed case of pulmonary tuberculosis.
- Patients of EPTB with Pulmonary tuberculosis

METHODS:

• STUDY DESIGN:

This is a retrospective, descriptive study of diagnosed patients of EPTB of all age groups.

• STUDY AREA AND STUDY PERIOD:

The study was conducted in the MGM medical college and hospital, Aurangabad, a tertiary care hospital. Data for this study was obtained from JAN 2018 to DEC 2020.

RESULTS:

The retrospective study conducted in MGM in the year 2018, 2019 and 2020 revealed slightly higher incidence of lymph node TB (36.84%) followed by pleural TB (34.58%) with female preponderance.

SITE	<10	10-20	21-40	41-60	>60
Lymph node TB	5	29	61	17	3
Pleural T.B	1	7	64	12	2
Abdominal T.B	0	14	17	1	1
Genitourinary T.B	0	1	3	1	0
Others	2	3	9	0	2



Incidence of EPTB based on anatomical site

LYMPH NODE T.B	98	36.84%
PLEURAL T.B	92	34.58%
ABDOMINAL T.B	32	12.03%
GENITOURINARY T.B	6	2.25%
BONE T.B	18	6.76%
OTHERS	15	5.63%

CONCLUSION:

Although EPTB cases are found in all age groups, the incidence is more in the young adult age group in our study (21-40 years). Women have higher risk of developing EPTB than men. The study conducted in MGM revealed slightly higher incidence of Lymph node tuberculosis compared to pleural tuberculosis followed by abdominal tuberculosis which accounts for around 32% and bone tuberculosis followed by genitourinary tuberculosis with around 6.7% and 2.2% respectively.

Lymph node tuberculosis followed by pleural tuberculosis is more common in females. While pleural tuberculosis is more common in male gender followed by lymph node tuberculosis.

DISCUSSION:

There are two types of tuberculosis mainly pulmonary and extrapulmonary tuberculosis. Extrapulmonary tuberculosis is involvement of organs other than lungs. Mycobacterium tuberculosis almost affect every organ in the body. The incidence of EPTB is gradually increasing now a days. Diagnosing EPTB is difficult as the samples taken from the site generally has less bacterial load. Most common EPTB is Lymph node followed by pleural Tuberculosis. The more serious of EPTB is miliary tuberculosis or Disseminated tuberculosis which spread through hematogenous route. In some patients there will be pulmonary tuberculosis associated with Extrapulmonary tuberculosis, so patient should be properly evaluated for any lung parenchymal involvement. EPTB is generally caused due to reactivation and spread of tuberculosis from primary infection from the lungs to extra pulmonary sites, delayed diagnosis of primary tuberculosis and decreased immunity due to lifestyle changes and improper nutrition. Most commonly affected age group are in between 20 to 40 years. Females are most commonly affected compared to male gender.

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