



A STUDY ON EXTRA PULMONARY TUBERCULOSIS: SITE DISTRIBUTION

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ABSTRACT **Background:** Extra-pulmonary tuberculosis can affect the lymph nodes, pleura, bones, joints, genito-urinary tract, nervous system (meningitis, tuberculoma), abdominal tuberculosis (intestines, mesentery, solid organs), skin.

Materials and Methods: It is a record based, observational prospective study which assesses the presentation and evaluation of the site of distribution of extrapulmonary tuberculosis and management of it in a tertiary care hospital.

Result: In present study, 26% of cases from lymph node TB, 20% cases from CNS and pleural TB, 18% cases from GIT, 8% cases from skeletal TB, 4% cases from GUT, 2% cases from ocular and 2% cases from pericardial TB

Conclusion: The frequency of extrapulmonary TB in this study was highest in lymph node followed by pleural, CNS, GIT, skeletal and others respectively

KEYWORDS : Extrapulmonary, TB, lymph node.

INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by genus *Mycobacteria*. The disease primarily affects lungs and causes Pulmonary TB (PTB).

Extra-pulmonary tuberculosis can affect the lymph nodes, pleura, bones, joints, genito-urinary tract, nervous system (meningitis, tuberculoma), abdominal tuberculosis (intestines, mesentery, solid organs), skin.^[1]

All those who get infected do not necessarily develop tuberculosis. The lifetime risk of breaking down to disease among those infected with tuberculosis is 10-15%, which gets increased to 10% per year amongst those co-infected with HIV.[2] Other determinants such as diabetes mellitus (DM), tobacco smoking products, alcohol abuse, malnutrition, immunosuppressive conditions also increase the risk of progression from infection to tuberculosis disease.^[3,4]

Identification of mycobacterial presence in a clinical sample is a specific diagnostic test.

Diagnosis of extra pulmonary tuberculosis and sputum smear negative pulmonary tuberculosis is challenging due to pauci bacillary disease and is mostly multidimensional involving judgmental assessment of clinical features and disease related structural radiological changes.

This study was undertaken to analyze the various clinical presentations in patients with extra pulmonary tuberculosis in the Department of General Medicine, a tertiary care hospital, Jamnagar.

AIMS AND OBJECTIVES

To classify extra pulmonary tuberculosis patients in relation to different clinical sites of involvement.

MATERIAL AND METHODS

STUDY DESIGN

It is a record based, observational prospective study which assesses the presentation and evaluation of the site of distribution of extrapulmonary tuberculosis and management of it in a tertiary care hospital.

STUDY PERIOD

Study was conducted between November-2019 to November-2020

SAMPLE SIZE

In the study period of 12 months among the patients seen under the Department of General Medicine, after applying inclusion criteria, 50 patients were included in this study.

INCLUSION CRITERIA

- All extrapulmonary tuberculosis patients

- Those willing to give written consent
- All previous tuberculosis patients
- All patient with other co-morbid conditions

EXCLUSION CRITERIA

- Not willing to give written consent
- Pulmonary tuberculosis patient

OBSERVATION

Table-1: Site of Distribution of extrapulmonary tuberculosis (n=50)

No.	Sites	No. of patients	Percentage
1	lymph node	13	26%
2	CNS	10	20%
3	Pleural	10	20%
4	GIT	9	18%
5	Skeletal	4	8%
6	GUT	2	4%
7	Ocular	1	2%
8	Pericardial	1	2%

In the present study, out of 50 cases 26% of cases from lymph node TB, 20% cases from CNS and pleural TB, 18% cases from GIT, 8% cases from skeletal TB, 4% cases from GUT, 2% cases from ocular and 2% cases from pericardial TB.

DISCUSSION

Table-2: Comparison of present study with other studies

Site	S. Rama Ramaprakash ^[5]	Dr. Arvind Vadlokonda ^[6]	Present Study
LN	131 (24.89%)	57 (37.75%)	13 (26%)
Pleural	148 (26.12%)	33 (21.85%)	10 (20%)
Abdominal	51 (9.69%)	6 (3.97%)	9 (18%)
CNS	66 (12.54%)	13 (8.61%)	10 (20%)
Skeletal	65 (12.35%)	15 (9.93%)	4 (8%)
Others	67 (12.73%)	22 (2.1%)	4 (8%)

In the Rama Prakash study, 24.89% cases from LN, 26.12% cases from Pleural, 9.69% cases from abdominal, 12.54% cases from CNS, 12.35% cases from Skeletal and 12.73% from others.

In Dr. Arvind Vadlokonda study, 37.75% cases from LN, 21.85% cases from Pleural, 3.97% cases from abdominal, 8.61% cases from CNS, 9.93% cases from Skeletal and 2.1% from others.

In the present study, 26% cases from LN, 20% cases from Pleural, 18% cases from abdominal, 20% cases from CNS, 8% cases from Skeletal and 8% from others.

CONCLUSION

The frequency of extrapulmonary TB in this study was highest in lymph node followed by pleural, CNS, GIT, skeletal and others respectively.

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