Original Article

ENT manifestation in extrapulmonary tuberculosis

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ABSTRACT:

Objective: *In this study our main goal is to evaluate the ENT manifestation in extrapulmonary tuberculosis patients.*

Method: *This cross-sectional study was carried out at Sylhet Women's Medical College from 19th August 2019 to 18th August 2020. A total 150 patients included in the study, hospitalized for investigation for pyrexia of unknown origin and clinically suspected extrapulmonary tuberculosis patients.*

Results: *During the study, more than fifty percent (56.0%) of the patients were in the age group 20-40 years and 30.0% of the patients were in age group 20 and below while only 14.0% of the patients were in the age group above 40 years. Also, male and female ratio of the patients was almost equal. About three fifths of the patients had history of smoking. One tenth of the patients had the history of alcohol consumption. During the study extrapulmonary tuberculosis vertical cases were found in 90% followed by laryngeal tuberculous mastoiditis found in 3% cases and Cervical Abscess found in 7% cases.*

Conclusion: *The practical implications of an awareness of ENT extrapulmonary tuberculosis are a benefit of anti-tubercular therapy and hence conservative management usually suffices.*

Keywords: *ENT manifestation, extrapulmonary tuberculosis (EPTB), laryngeal tuberculosis.*

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INTRODUCTION

Tuberculosis is a common disease throughout the world, especially in developing countries. Millions of people have died from tuberculosis (TB), a leading chronic infectious killer of all age groups and the second most common infectious disease worldwide.

It is an infection with human strains of Mycobacterium tuberculosis with the occurrence of the characteristic immune response. [1-2] Pulmonary TB (PTB), the most common type of TB, has the great epidemiological significance due to its extremely contagious nature. [3] The proportion of patients with extra-pulmonary TB (EPTB) relative to those with PTB varies among countries and depends on associated diseases, geographical, social, ethnic and economic parameters. [4-5] EPTB is defined according to WHO classification criteria as an infection by MTB which affects tissues and organs outside the pulmonary parenchyma.

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It represents between 20 and 25% of all TB cases. [6]

In this study our main goal is to evaluate the ENT manifestation in extrapulmonary tuberculosis (EPTB) patients.

OBJECTIVE

- To assess the ENT manifestation in extrapulmonary tuberculosis (EPTB) patients.

Methodology

Study type:

- This was a cross-sectional descriptive type study.

Place of the study and period of the study:

- The study was carried out at Sylhet Women's Medical College from 19th August 2019 to 18th August 2020.

Study population and sample size:

- A total 150 patients included in the study, hospitalized for investigation for pyrexia of unknown origin and clinically suspected extrapulmonary tuberculosis (EPTB) patients.

Sampling method:

- Sample of the study was selected by purposive method.

Procedure of data collection:

- Detailed history was taken then thorough clinical examinations were done. All these data were collected by using preformed data sheet.

Data analysis:

- Data entry, quality control and data cleaning had been done following standard method. All data forms and questionnaires had been checked for errors and necessary correction had been made before data entry. Data had been entered using data entry program with built in range and consistency checks. The prevalence rate had been determined by simple percentages, tables and graphs using Excel and SPSS software.

RESULTS

In table-1 shows distribution of the patients according to age and gender where more than fifty percent (56.0%) of the patients were in the age group 20-40 years and 30.0% of the patients were in age group 20 and below while only 14.0% of the patients were in the age group above 40 years. Also, male and female ratio of the patients was almost equal. The following table is given below in detail:

Table-1: Distribution of the patients according to age and gender.

Age group (years)	**%**
20 and below	30%
20-40 years	56%
above 40 years	14%
Gender	**%**
Male	48%
Female	52%

In table-2 shows distribution of respondents by occupation. More than one fourth of the respondents were housewife

(28.0%) and 24.0% of the respondents were students and day laborer while 14.0% of the respondents were employee. The following table is given below in detail:

Table 2 Distribution of respondents by occupation

Occupation	Percentage
Housewife	28%
Students	24%
Day laborer	24%
Employee	14%
Businessman	6%
Unemployed	2%
Retired	2%

In figure-1 shows distribution of respondents by residence. Half of the respondents resided in the urban area and half were in the rural. The following figure is given below in detail:

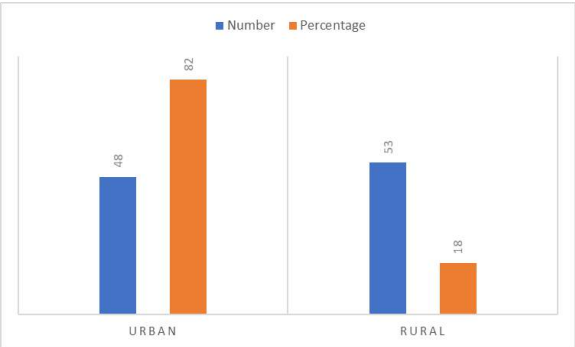

Figure-1: Distribution of respondents by residence

In table-3 shows distribution of respondents by smoking history and alcohol consumption. About three fifths of the patients had history of smoking. One tenth of the patients had the history of alcohol consumption. The following table is given below in detail:

Table 3 Distribution of respondents by smoking history and alcohol consumption.

Smoking history	Percentage
Yes	62.0
No	38.0
Alcohol consumption	**Percentage**
Yes	12.0
No	88.0
Diabetes Mellitus	**Percentage**
Yes	25%
No	75%

In table-4 shows distribution of the patients according to ENT manifestation where extrapulmonary tuberculosis vertical cases were found in 90% followed by laryngeal tuberculous mastoiditis found in 3% cases and Cervical Abscess found in 7% cases. The following table is given below in detail:

Table-4: Distribution of the patients according to ENT manifestation

ENT manifestation	%
Extrapulmonary vertical infection	**90%**
Laryngeal tuberculosis	3%
Cervical Abscess	7%
Total	100%

In table-5 shows previous treatment status of the patients where during the study period 31% fresh cases were found. The following table is given below in detail:

Table-5: Previous treatment status of the patients

Previous treatment status	%
Default	43%
Relapse	26%
Fresh cases	31%

DISCUSSION

More than fifty percent of the patients were in the age group 20-40 years and the mean (SD) age was 31.4 ± 15.2 years and Male and female ratio of the patients was almost equal. In another study similar result was found where the mean (SD) age was 29.2 ± 12.2 years.[3] This result was agreed with other report which was found that the mean age of tuberculous group was 33.9 ± 13.2 years that of malignant group was 45.5 ± 16.8 years.[5]

The commonest predisposing factor for extrapulmonary tuberculosis was found to be chronic alcoholism where as in one study found that, diabetes and HIV infection as predisposing factor.[6] In another study, one case of HIV infection was present.[7] Extrapulmonary tuberculosis vertical cases were found in 90% followed by laryngeal tuberculous mastoiditis found in 3% cases and Cervical Abscess found in 7% cases Which was supported by several studies. [5-6]

CONCLUSION

The practical implications of an awareness of ENT extrapulmonary tuberculosis are a benefit of anti-tubercular therapy and hence conservative management usually suffices.

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