

## **SURVEY OF EXTRA PULMONARY TUBERCULOSIS IN D.I. KHAN**

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### **SUMMARY**

A total of 360 biopsy specimens were sent to our clinical laboratory by the surgical department of Distt: Head-quarter Hospital, Dera Ismail Khan during the year 1987-88. Out of these, 107 (29.7%) were non-tumors. Twenty of these (18.7%) were proved to be tubercular. Tuberculosis of the skin (35%) was found to be most common followed by G.I.T (20%) Bones and Joints (20%), lymphnodes (15%) and testis (10%). Mostly young adults and to some extent children were affected. Mostly the patients belonged to city slums were of lower socio-economic class and were living in crowded situation.

### **INTRODUCTION**

Tuberculosis, both pulmonary and extra pulmonary is a common disease and a major health problem of the developing countries. Entry of the tubercle bacillus into the body by the elementary or respiratory tract is not necessarily followed by a clinical illness, the development of which depends on several pre-disposing and precipitating factors.

Age has an important bearing on the incidence, morbidity and mortality of the disease. The younger age group is more vulnerable to tuberculosis. The standard of living is a great contributory factor. The prevalences of tuberculosis diminishes as social and economic conditions improve. Poor housing with associated overcrowding increases the risk of infection.

In extra pulmonary tuberculosis organs most commonly involved are the lymph nodes, kidney, bladder, bones and joints, genital tract, intestine, brain meninges, skin, adrenals and eyes. Extra pulmonary tuberculosis almost always occurs secondary to pulmonary or tuberculosis elsewhere.

The aim of this survey was to study the frequency of various forms of extra pulmonary tuberculosis, and its relationship to age, type of lesion and its presentations and its relationship to poor socio-economic status and overcrowding.

### **MATERIALS AND METHODS**

Three hundred and sixty (360) biopsy specimen were sent to our clinical laboratory for histopathological examination during the year 1987-88 by Surgeon District Headquarter Hospital, D.I. Khan. Our Distt: Hospital has a large catchment area and receives patients from D.I. Khan Division, its adjoining tribal areas and from Distt: Bhakkar and Mianwali (Punjab). The specimens were examined for histopathological study using cosine and hematoxylin stain. Special stains were used when needed.

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## RESULTS AND DISCUSSION

Of the total 360 biopsy specimens received during the year 1987-88, 107 (29.7%) were non tumors. Of these twenty (20) i.e. (18.7%) were proved to be tuberculosis. The relative frequency of various forms of extra pulmonary tuberculosis and their relation to age is shown in the attached tables:

In a study<sup>1</sup> undertaken by Bokhari et al, tuberculosis of the lymphnodes is the most common form of extra pulmonary tuberculosis in this part of the world. In our series, tuberculosis cutis is the most common variety, the probable reason may be that biopsy if needed is used as a final tool for the diagnosis of tuberculous lymphadenitis. We observed that tuberculosis cutis affects mostly young adults and children. Most of these patients come from areas where pulmonary tuberculosis was common and who lived in crowded situation in the city and belonged to poor socio-economic class Table-1. A similar finding was observed by Mackenna and Cohen.<sup>2</sup>

**Table-I** Age and Sex Distribution in various forms of extra pulmonary tuberculosis:

Organ involved	Age	No	Male	Female
Skin	9-35	7(35%)	3	4
G.I.T	13-28	4(20%)	2	2
Lymphnode	25-35	3(15%)	1	2
Bone & Joints	12-22	4(20%)	2	2
Genital Tract (Testis)	49-70	2(10%)	2	0

Abdominal tuberculosis and tuberculosis of bones and joints goes side by side. In our study one fifth of the cases were suffering from abdominal tuberculosis Table 2.

**Table -2:** Characteristics of Lesions in Various Forms of Extra Pulmonary Tuberculosis

Organ	Site of Lesion	No	Age in Years	Mode of Presentation
G.I.T	Pylorus	1	28	Hard growth epigastrium
	Ileum	1	13	Chronic abdomen
	Colon	1	25	Nodular mass upper abdomen
	Caecum	1	20	Intestinal abstraction
Bone & Joints	Wrist	1	12	Swelling
	Wrist	1	18	Swelling
	Elbow	1	20	Swelling
	Sternoclavicular Joint	1	22	Weeping ulcer

This is in conformity with the study<sup>3</sup> carried out in Cape Town (Africa) in 1985. It appears that the condition is more common in adults particularly in the second and third decade of life. Again the tuberculosis lesion seems to be more common in the distal bowel except in one case where the lesion was at the pylorus. These findings are in close correlation to those reported by Johnson et al.<sup>4</sup>

In Genita-urinary tract testis were the sites of tuberculosis lesion. Both the patients were of the higher age group i.e. forty-nine and seventy respectively. This is an interesting observation, as in all other forms of extra pulmonary tuberculosis mostly young adults and some children are affected Table-1.

In conclusion the present study indicates that extra pulmonary tuberculosis is still common in our society and it affects mostly the young adults who are the important active members of the community. Since most of our patients belonged to city slums, were poor, and lived in crowded

situations it is presumed that improvements in the socioeconomics set up and standard of living can eliminate the malady.

As treatment of extra pulmonary tuberculosis is based on intensive and prolonged exposure of the organism to bactericidal drugs using a regiment of two drugs for at least 1-1/2 years to two years<sup>4</sup> health education of the patients can play an important role in the complete cure of these patients.

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