

Pattern of Tuberculosis in General Practice

Pages with reference to book, From 183 To 184

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Abstract

An audit of 690 cases of tuberculosis out of 46,276 patients seen during the last 25 years in a busy general practice is reported. Of the 690 cases, 67% were pulmonary, 33% extra-pulmonary TB. Modes of both types of tuberculosis are described and the reason for extra-pulmonary tuberculosis are discussed (JPMA 48:183, 1998).

Introduction

Tuberculosis is a common disease in Pakistan and World Health Organization in 1987-88, reported a sputum positive prevalence of 0, 17 per 1000 million¹. Tuberculosis is more prevalent in urban low socio-economic conditions, chiefly due to malnutrition, over crowding and unhygienic conditions. With increased resistance to anti-tuberculosis drugs that is being reported from all parts of the world the problem has become acute with AIDS compounding its incidence in developing countries, specially in Africa and South East Asia. Treatment with three or four drugs is being advocated, which makes it much more expensive; this further reduces the compliance, as not many patients can afford expensive drugs over a period of six to nine months. An audit of all the cases of tuberculosis seen in a busy general practice, in a middle to lower middle class populace during the past 25 years was conducted by adopting simple organizational measures of health care to see the pattern of disease encountered and evaluate the final outcome.

Patients and Methods

In the general practice, record of all patients seen over 20 years were maintained. Special sheets and reference registers with complete details of the patients were filled in. Reference cards had individual numbers for each patient which were used for all the future ailments, that helped in establishing a system for supervision and for operational management, treatment and follow-up². In this retrospective analysis, case records of 813 suspected cases of tuberculosis seen during the study period were reviewed. In each case the patient had X-ray's, complete blood picture with ESR, Mantoux test and sputum for A.F.B. Other investigations i.e. FNAB, histopathology and specialized X-ray's i.e. small bowel enema, lumbar puncture, ultra sound guided aspiration of psoas abscess and thoracocentesis were also obtained when required. Based on the site of lesion, cases were divided into pulmonary and extra pulmonary cases.

Results

Of 813 suspected cases of tuberculosis, 123 were non-tubercular and hence excluded. Of the 690 remaining cases, 335(48.5%) were male and 355(51.4%) females³. Ages of the patients ranged from 2 to 60 years, 70% were between 10-39 years; of the total, 466 (68%) were pulmonary tuberculosis, 27 (4%) had both pulmonary and extra pulmonary tuberculosis and 224 (32.4%) were only extra pulmonary. The chief presenting symptoms among the pulmonary cases were cough with expectoration,

fever, weight loss, malaise. Haemoptysis was present in 127 (18%) cases and night sweat in 10 cases. Infiltration was observed in 218 (47%) cases, of which 110 (59%) were bi-lateral. Infiltration plus cavitation was seen in 91 (20%) and 27 (6%) were pneumonic (Table I).

Table I. Pattern of Lung lesions (n=466).

	Total		Left		Right		Both	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Infiltration	235	50	56	12	75	16	104	22
Infiltration with cavities	91	20	37	6	52	11	2	2
Pleurisy	29	6	14	3	15	3	0	0
Pneumothorax	28	6	9	2	15	3	4	1
Pneumonic	27	6	9	2	15	3	3	1
Fibrotic	56	12	18	4	24	5	14	3

Among extrapulmonary tuberculosis the chief presentation was swellings of glands. very few complained of constitutional symptoms, except these with pleural and pericardial involvement and these suffering from abdominal, bone and joint disease. The pattern of extra-pulmonary lesion is presented in Table II.

Table II. Pattern of extra pulmonary lesions (n=224).

Lesion	Nos.	%
Hilar lymph adenitis	80	36
Peripheral lymph adenitis	51	23
Pleural effusion	34	15
Primary abdominal tuberculosis	23	10
Spines	15	7
Bones and joints	8	4
Meningitis	4	2
Pericardial effusion	3	1
Paratrachial lymph adenitis	2	0.9
Others (Larynx, BCG vaccination etc)	4	2

In this series; except one case of axillary and one of supracavicular lymphadenopathy, none required surgical intervention.

Discussion

The frequency of extra pulmonary tuberculosis is consistent with UK experience¹, where 34% of the Asians compared to 18% of whites were seen with this lesion. In USA there has been a gradual increase of extra pulmonary disease over the years. It has always been suggested that in areas where bovine tuberculosis is common, lymphatic and abdominal tuberculosis is more frequent. In a study from Lahore no bovine bacilli were discovered in 100 cervical gland specimens⁴. Some atypical mycobacteria, mainly Scotochromogenic were isolated. Similarly in Saudi Arabia, atypical Mycobacterium mainly Mycobacterium Fortuitum and Mycobacterium Chloim were isolated. Asian and African variants were isolated from both Saudi and non Saudi patients⁵. The incidence was highest among young adults, and in females. In Karachi there is a gradual increase in extra pulmonary tuberculosis. It seems that altered immune status may be responsible for this change. Tubercular meningitis, a disease of childhood is now being reported amongst adults. Recently fifty consecutive cases of meningeal tuberculosis amongst adults aged 15-70 years were reported from tertiary treatment centers⁶. Diagnosis of extra pulmonary tuberculosis presents a problem specially in abdominal tuberculosis, which comprised 10% in these series. Fourteen (6.1%) of these had ileocaecal tuberculosis and 6 (26%) had peritonitis. In majority of cases modern technique of imaging i.e. small bowel enema, ultra sound, fine needle aspiration biopsy are of great help for diagnosis, subject to proper clinical assessment.

References

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