

periphery of the abscess and from tissue of the abscess wall⁽⁶⁾. A functional grouping of the lower thoracic segments with the lumbar segments may be preferable to descriptive anatomical subdivision of the spine. The region T.10-L.4, being the mobile segment might be considered as one functional unit which is most commonly affected⁽⁷⁾.

Discussion on the choice of treatment is given in another paper in this issue.

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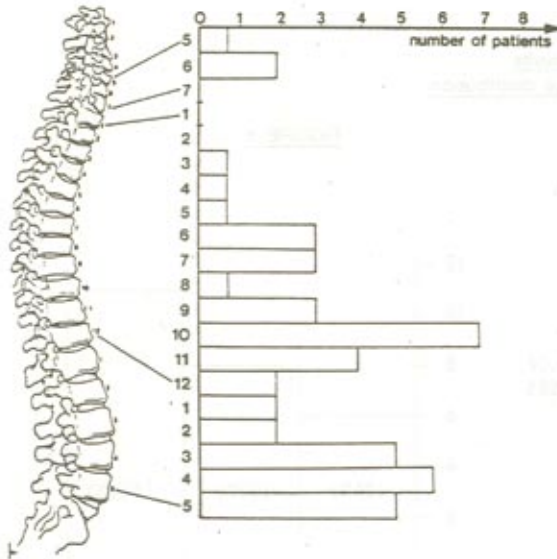
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Thoracic spine was much more commonly affected (52%) than Lumbar spine (40%). Lesions were commonest around 10th thoracic vertebra.

FIGURE 2



VERTEBRAL INVOLVEMENT

Organism yield :

Whenever an abscess shadow was seen on radiographs, aspiration was attempted and if pus was obtained it was sent for culture. Of 12 such specimens analyzed the results were as follows :

AFB seen on smear with ZN stain	3 cases
AFB not seen on smear with ZN stain	9 cases
Positive culture for tubercle Bacillus	7 cases
No growth obtained in	5 cases

In these cases a needle biopsy of the involved bone was also performed, 8 cases were reported as chronic granulomatous inflammation. Classical tubercle formations were not reported on any of these cases.

Management :

There are two modalities of treatment.

1. Antituberculous drugs without surgery^(1,2).
2. Surgery with provision of anti tuberculosis drugs^(3,4).

Of the 25 cases under review, 12 cases had undergone surgery and 13 cases were treated conservatively.

Outcome was judged as favorable or unfavorable. Criteria used were subjective improvement, a return of power, a reduction of ESR and signs of healing on radiographs. The results are noted in Table 3.

TABLE 2 : COMBINED DIAGNOSTIC RESULTS

SMEAR	C/S	HISTOP	CASES
+	+	+	2
	+	+	2
+	+		1
	+		2
		+	5

TABLE 3

Number of cases	Treatment	Result	
		Favorable	Unfavorable
12	Surgery and anti TB drugs.	10	1 (+ 1 death).
13	Drugs regime without surgery.	9	3 (+ 1 death)

Surgical management consisted of exploration and debridement. If only drainage of the abscess was carried out by incision or aspiration, the incidence of recurrence was very high. (5 cases out of 7).

Death in both series was due to unrelated causes.

Discussion :

Skeletal tuberculosis is always secondary to a primary lesion elsewhere but the active primary lesion is rarely found. In most series active pulmonary tuberculosis is found only in four to six percent of cases. There is probably a second infection which takes hold due to previously sensitized tissues. Negative chest x-ray does not exclude a diagnosis of tuberculosis.

ESR is a very useful index for diagnosis and monitoring progress. It is not as high as in spinal myelomatosis or ankylosing spondylitis and commonly ranges between 40 and 90 mm/hour.

Presence of abscess shadow in a plane radiograph is not diagnostic of an abscess. It may be a dry lesion and absence of a shadow does not exclude an abscess because in lumbar spine the psoas mass conceals the shadow CT scan is needed to make an accurate diagnosis⁽⁵⁾.

Organism yield from the tissue or pus is not always obtained because of paucity of the organism. Diagnosis is made by histological features of chronic granulomatous inflammation even if classical "tubercles" are not seen. It has been suggested that the yield can be improved with Kerchner's medium and by taking samples from the

PATTERNS OF SPINAL T.B. AS SEEN IN AN URBAN HOSPITAL

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Abstract :

A review of 25 patients with TB spine seen between January 1, 1986 and December 31, 1989 showed that 44% were older than 40 years, 76% presented with backache, 56% with weakness of legs, 52% with inability to walk, 44% were febrile, 56% had restricted spinal movements, 48% had decreased muscle power, 44% were suffering from kyphosis, 40% had spasticity and clonus while wasting of lower limb musculature was noted in 36% of cases. Chest X-ray showed no active pulmonary lesion in any patient. Smear for AFB was positive in 25%, culture in 58.3% and histopathology in 66% of cases. Thoracic lesions were present in 52%, lumbar in 40% and cervical in 8%. The results of surgical and medical modalities of treatment were comparable.

Key words : T.B. Spine

Introduction :

Tuberculosis of spine is an ancient disease. It has caused a great deal of suffering over centuries. It is only in the recent past that we have attained a better understanding of its etiology, pathophysiology and natural history. In advanced countries of the world, with improvement of standard of living and pasteurization of milk, its incidence has declined. In third world countries it still remains a common condition.

In order to determine the distribution of spinal tuberculosis in various age groups, its predilection for particular socio-economic groups, the most common presenting symptoms and signs, crucial laboratory investigations, its predilection for certain sites and appropriate modalities of management, we undertook a retrospective analysis of cases seen at our hospital over last three years.

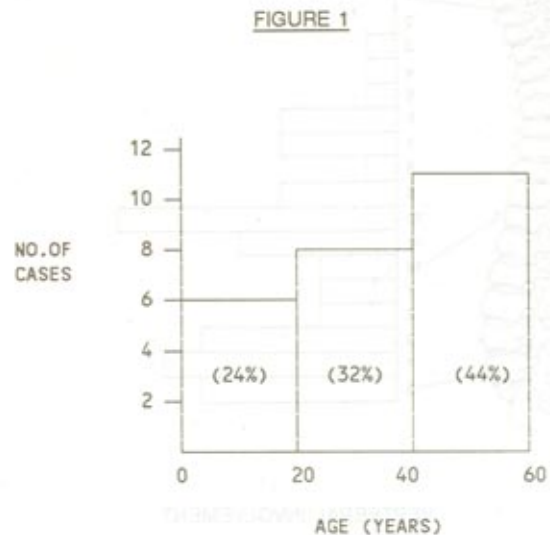
Materials and Methods :

The medical records of 25 patients with tuberculosis of the spine, diagnosed on clinical radiological and histological grounds were analyzed. There were 12 female and 13 male patients, between 1986 and 1989.

Investigations :

Erythrocyte Sedimentation rate was consistently raised. Mean rise was 66 mm/hour the lowest being 20 and highest 180. It was also noted to be a reliable indicator of the progress of the disease.

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Results :**Age distribution****TABLE I**

Symptoms :	n	(%)
Backache	19	(76)
Heaviness or weakness of the legs.	14	(56)
Inability to walk	13	(52)
Fever	11	(44)
Numbness in the legs	4	(16)
Weight loss.	3	(12)

Signs :	n	(%)
Muscle spasm and restriction of movements	14	(56)
Kyphosis	11	(44)
Discharging sinus	2	(8)
Loss of power (< 3)	12	(48)
Muscle wasting	9	(36)
Spasticity and clonus	10	(40)

Chest radiographs were taken routinely. There were no cases with active pulmonary tuberculosis. Old healed lesion of TB was seen in only two cases.

Radiographs of the affected part of the spine showed classical changes of tuberculosis but only 66% of cases showed an abscess shadow.