INTRAMEDULLARY SPINAL TUBERCULOMA: A CASE REPORT

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Summary: Intramedullary spinal tuberculomas are rare. We present an intramedullary tuberculosis which was surgically removed in lolo as a neoplasm but was histologically confirmed to be a tuberculoma post-operatively.

INTRODUCTION

The protean manifestations of tuberculosis still baffle the clinicians and intramedullary tuberculoma is a rare presentation which may not be considered in the differential diagnosis. A recent review has mentioned documentation of 179 such cases in world literature¹. Besides, most of the patients of intramedullary tuberculosis were found to have tuberculous foci elsewhere in the body and in a majority of the reported cases, pathological confirmation of tuberculoma was not made. We present a case of pathologically confirmed intramedullary spinal tuberculoma in an immunocompetent patient without any evidence of tuberculosis elsewhere in the body.

CASE REPORT

A 20 year old lady presented with neck pain of 5 months duration which was followed by a feeling of heaviness with progressive weakness, tremors and clawing in right upper limb of two months duration. Subsequently, progressive weakness of right lower limb and difficulty in walking appeared. There was no history of bladder and/or bowel involvement.

Physical examination revealed increased tone in both right upper and lower limbs with power of grade 3/5 and 4/5 respectively. All deep tendon reflexes were exaggerated with clonus in right ankle and knee. Superficial reflexes were absent. Right

Figure 1(a) : Gadolinium enhanced T1 weighted MRI sagittal view of spine showing homogeneous contrast enhancement

Figure 1 (b) : GadoliniumenhancedT1 weighted MRI axial view showing homogeneous contrast enhancement

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plantar reflex was upgoing. On sensory examination, there was about 25% loss of pain and temperature sensations on left side and loss of position and vibration sense on right side segment below C4. MRI revealed an intramedullary space occupying lesion at C3-4, hypo to isointense on T2 WI with homogeneous enhancement on post contrast T1 WI [Figs. 1 (a) and (b)]. All laboratory results and complete blood counts were within normal limits. Chest X-ray revealed no abnormality. Presumptive diagnosis of a benign intramedullary neoplasm was made.

Intraoperatively, the spinal cord was widened at C4 level leading to obstruction of CSF flow. Tumour was exposed by longitudinal myelotomy under microscope view. It was found to be intramedullary, mainly on the right side, firm, well-defined, lobulated and avascular. It was removed totally but piecemeal (Fig.2). Histopathological examination showed multiple tuberculous granulomas with evidence of caseation (Fig.3). Post-operatively, the course was uneventful. Patient was put on 4 drug short course chemotherapy and showed improvement with slow recovery of motor function.

**DISCUSSION**

Although spinal tuberculosis is fairly common in developing countries, intramedullary spinal tuberculosis is a rare disease. It was first reported by Abercrombie in 1828. An extensive review of world literature, conducted by Lin, revealed 105 cases of intramedullary tuberculosis upto 1960, 88 of which were diagnosed on post-mortem examination. MacDonnel et al noted 43 cases in international literature between 1960 and 1990, but only 18 cases had full data and in them intramedullary spinal tuberculosis was found to occur in relatively young patients (mean age 28.6 years) and more frequently in women (63% of cases). Commonest symptoms were those of subacute spinal cord compression (mean duration 2.3 months) and extra-spinal tuberculosis, predominantly pulmonary, was found in 69% cases. Ratliff et al reported 31 cases after 1990.

After the review by Ratliff et al', 15 cases have been reported from developing nations (12 from India, 2 from Turkey and 1 from China). Most of the cases (12 out of 15) had tuberculosis elsewhere in body and only in 4 cases was pathologically confirmed evidence found.

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PRE-TEST COUNSELLING FOR HIV

With the uprising HIV epidemic in the country, it has become imperative for every physician to acquire knowledge and skills for HIV counselling comprising general post-test and HIV-positive patient counselling. The guidelines for pre-test counselling are:

☐ Put the person at ease; establish personal rapport.

☐ Explain in layman’s language what HIV is, how it occurs, any wrong perception that may be current, and its consequences (a possibility of progression to AIDS).

☐ Explain the benefits of HIV testing-medical as well as sociological.

☐ Detail the steps of HIV testing, the significance of positive or negative result, the margin of error in the test being offered and whether it is for screening or confirmation.

☐ Stress that a positive result does not mean AIDS or even a prediction that it must occur, sooner or later.

☐ Discuss at length the confidentiality issue and its implications. Frankly answer doubts and fears; who all shall be informed by the person concerned, if the test is positive. Explain explicitly the meaning and implications of giving written informed consent, the right to refuse the test and the potential consequences of refusal, especially for the spouse and family.

☐ Assure that medical help will be extended even if the test is refused.

☐ Allow adequate time for pondering over the situation and making the decision in favour of the test.

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