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A Case of Tuberculous Radiculomyelitis Despite of Proper Antituberculous Treatment in a Patient of Tuberculous Meningitis

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Tuberculous radiculomyelitis (TBRM) is a complication of tuberculous meningitis (TBM), which has been reported rarely in the modern medical literature. We describe a case of TBRM, which developed during the treatment of TBM. A 28-year-old man suddenly developed lower back pain, flaccid paraparesis, urinary incontinence, while the TBM was improving with the treatment at 9th day after admission. Spinal MRI revealed leptomeningeal enhancement along with thoracolumbar spinal canal, thickening of nerve roots, spinal meninges and intramedullary high signal lesion in T2 level.

Key Words: Tuberculous meningitis, Radiculomyelitis

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(radiculomyelitis)
         (root pain),
                                                                                                  37.8
                                     .¹ Wadia Dastu<sup>2</sup>
가
                   (tuberculoma)
       1
                                                                 240 mmH<sub>2</sub>O
                                                                                                                        890
                                                                                 1920 /mm<sup>3</sup>(
                                                                                                        95%),
                                                                             17.1 mg/dl (
                                                                 mg/dl,
                                                                                                89 mg/dl)
                                                                                           rifampin, isoniazid, pyrazi-
                                       2
                                                                                  2
                    28
                                                                 namide
                                                                                                           3
                                              2
                                                                        9
                                                                                                 (lower back pain),
                                                                                           (flaccid paraparesis),
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MRI
                 T1
                                        (thora-
                                                                  3
columbar spinal canal)
                            (cauda equina)
                                                                             8
                                (leptomeningeal
enhancement)
                                        (conus
surface)
(meningeal enhancement)
                                          (Fig.
1),
                                                      가
                                                                                  (root pain),
                                     (Fig. 2). T1
           T2 level
                                                              가
                                                              가
(Fig. 3).
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Figure 1. MRI performed 10 days after treatment. A and B, sagittal T1WI before and after administration of iv gadolinium-DTPA, showing intense enhancement of the leptomeninges along with thoracolumbar spinal canal.

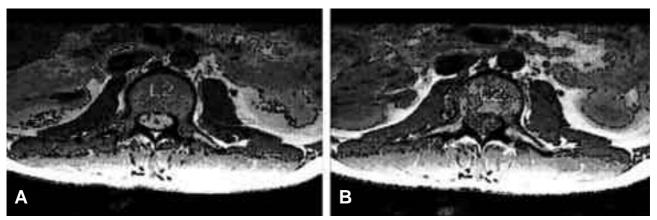


Figure 2. MRI performed 10 days after treatment. A and B, axial T1WI before and after admninstration of iv gadolinium-DTPA, showing thickening of nerve roots and spinal meninges.

MRI



Figure 3. MRI performed 10 days after treatment. Axial T2WI showing intramedullary high signal lesion in T2 level (white arrow).

REFERENCES

- Naidoo DP, Desai D, Kranidiotis L. Tuberculous meningomyeloradiculitis: a report of two cases. *Tubercle* 1991; 72:65-9.
- 2. Wadia NH, Dastur DK. Spinal meningitides with radiculomyelopathy. I. Clinical and radiological features. *J Neurol Sci* 1969;8:239-60.
- 3. Benenguer J, Moreno S, Laguna F, Vicente T, Adrados M, Ortega A et al. Tuberculous meningitis in patients infected with the human immunodeficiency virus. *N Engl J Med* 1992;326:668-72.
- Rao GP, Nadh BR, Hemaratnan A, Srinivas TV, Reddy PK. Paradoxical progression of tuberculous lesion during chemotherapy of central nervous system tuberculosis. *J Neurosurg* 1995;83:359-62.
- Hernandez-Albujar S. Arribas JR, Royo A, Gonzalez-Garcia JJ, Pena JM, Vazquez JJ. Tuberculous Radiculomyelitis Complicating Tuberculous Meningitis: Case Report and Review. Clinical Infectious Disease 2000;30:917-920
- 6. Horsley V. Chronic spinal meningitis: its differntial diagnosis and surgical treatment. *BMJ* 1909;1:513-7.
- 7. Dastur DK, Manghani DK, Udani PM. Pathology and pathogenetic mechanism in neurotuberculosis. *Radiol Clin North Am* 1995;33:733-52.
- Dastur DK, Wadia NH. Spinal meningitides with radiculomyelopathy. II. Pathology and pathogenesis. *J Neurol Sci* 1969;8:261-97
- 9. Gero B, Sze G, Sharif H. MR imaging of intradural inflammatory diseases of the spine. *Am J Neuroradiol* 1991;12:1009-19.