Abstract No.

A rare case of isolated Cauda Equina Nocardia farcinica infection.

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STUDY DESIGN: A rare case Cauda Equina syndrome due to isolated intramedullary Nocardia farcinica infection.

OBJECTIVE: To describe the first case of, Nocardia farcinica intramedullary spinal cysts leading to Cauda Equina Syndrome and to propose intramedullary cyst excision and spinal decompression, along with antibiotics for treatment of isolated cauda equina Nocardial infection.

SUMMARY OF BACKGROUND DATA: There are few reports concerning involvement of the spinal cord, and, to the best of our knowledge, there are only two previous reports of abscess of the cauda equina caused by Nocardia in an immunocompetent host.

METHODS: A 44 years old male Mine worker by occupation known case of COPD, hypertension and diabetes mellitus had complaints of low back pain radiating to both lower limbs with weakness of lower limbs,followed by which he was unable to pass urine and stools. He was admitted in Sir Ganga Ram Hospital for further evaluation and management, MRI of Dorso-lumber spine which was suggestive of well-defined sharply demarcated lesion from D11-D12 vertebra level till L3 vertebra which enlarged the conus region. On T1 WI – Iso to hyper intense lesion seen which was contrast enhancing (ring enhancing). No concurrent intracranial involvement with similar lesions was seen MRI brain. Laminectomy was done at the D12-L1-L2 level. A part of the surface of the cauda equina was revealed to be yellow in colour and expanded. The pus was located within the cauda equina, and debris resembling necrotic tissue covered the inner surface of the mass; the abscess was evacuated to the greatest extent possible. A bacterial examination of the debris revealed colonies of a Gram-positive bacillus, and on microscopic examination, irregularly weakly- and strongly-stained, beaded, branching, thin filaments were observed. Nocardia Farcinica was confirmed by culture.Post-operative period was uneventful and the patient gradually recovered.

RESULTS: In the reported case, a combination of antibiotics, debridements, and posterior spinal decompression for immediate stabilization of the spine resulted in a favorable outcome to palliate the Nocardia farcinica infection.

CONCLUSIONS:In this report, we present a very rare case of nocardiosis that manifested initially as a tumor-like configuration in the cauda equina. The differential diagnosis for an intradural lesion at the level of the cauda equina must include abscess, even when obvious signs and symptoms of infection are not evident.