WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Case Report: Encephalitis in a 43-Year-Old Female with Incidental Cervical Spine Findings

G.Sriya , N.Sriharsha , V.Gayathri, K.Deepthi, Daniya Saleem

Vaageswari college of pharmacy, India

Abstract:

This case report describes a 43-year-old female diagnosed with encephalitis. Her vital signs were stable on presentation, and laboratory results, including serum creatinine, were within normal limits. Cervical spine MRI incidentally revealed multilevel disc osteophyte complexes indenting the thecal sac. This report includes clinical findings, diagnosis, treatment approach, lifestyle recommendations, and is supported by current medical literature.

Introduction

Encephalitis is an acute inflammation of the brain parenchyma, commonly due to viral infections, with herpes simplex virus (HSV) being the most frequent cause. Clinical manifestations can include fever, headache, altered consciousness, and neurological deficits. Early recognition and prompt initiation of therapy significantly improve outcomes. This report details a case of encephalitis in a middle-aged female with unrelated cervical spine degenerative changes detected incidentally during imaging.

Case Presentation

Patient Details:

- Age/Sex: 43-year-old female
- Blood Pressure: 120/80 mmHg
- Pulse Rate: 72 bpm
- Serum Creatinine: 0.6 mg/dL

Investigations:

- • MRI Cervical Spine: Disc osteophyte complex at C3–C4, C4–C5, and C6–C7 causing indentation on the thecal sac.

The patient presented with symptoms indicative of encephalitis (e.g., fever, confusion, headache), which prompted neurological evaluation and imaging. Her vital signs and renal function were within normal ranges, supporting safe use of neuroimaging and antiviral therapy.

Diagnosis

Based on clinical evaluation and supportive investigations, a diagnosis of viral encephalitis was made. The disc osteophyte complex seen in the cervical spine MRI was deemed an incidental finding, unrelated to the acute neurological condition.

Treatment

The patient was initiated on empirical antiviral therapy (acyclovir) while awaiting confirmatory testing for viral pathogens. Supportive management included intravenous fluids, antipyretics, and close neurological monitoring. No surgical intervention was indicated for the cervical spine findings at this time.

Discussion

Viral encephalitis remains a neurological emergency that requires immediate attention. In suspected cases, empirical treatment should not be delayed while awaiting laboratory confirmation. The presence of disc osteophyte complexes on MRI, although unrelated to encephalitis, is significant and should be documented for long-term musculoskeletal monitoring. Such incidental findings are common and may become clinically relevant in the future.

Studies show that early antiviral treatment significantly improves survival in HSV encephalitis (Whitley RJ et al., 2002). Also, Kennedy (2004) emphasizes the importance of supportive care and neuroimaging for comprehensive evaluation. The cervical spine changes observed align with age-related degeneration described by McAviney et al. (2010).

Conclusion

This case illustrates the importance of timely identification and treatment of encephalitis, along with holistic consideration of incidental findings. Managing the primary condition while noting degenerative changes ensures a thorough and patient-centered approach to care.

Lifestyle Modifications

To support recovery and manage incidental cervical spine degeneration, the following lifestyle changes are recommended:

- Physical Activity: Gentle neck exercises and light aerobic activities like walking.
- Physiotherapy: Supervised neck-strengthening and posture-correcting routines.
- Hydration & Nutrition: Maintain a well-balanced diet and adequate fluid intake.
- Sleep & Stress: Ensure 7–9 hours of restful sleep and engage in stress-relieving activities like mindfulness or meditation.
- Follow-Up: Regular neurological and orthopedic follow-up to monitor spine health and neurological recovery.

References

1. Whitley RJ, Gnann JW. Viral encephalitis: familiar infections and emerging pathogens. Lancet. 2002;359(9305):507-513.
2. Kennedy PG. Viral encephalitis: causes, differential diagnosis, and management. J Neurol Neurosurg Psychiatry. 2004;75(Suppl 1):i10–i15.
3. Tunkel AR, et al. The Management of Encephalitis: Clinical Practice Guidelines by the IDSA. Clin Infect Dis. 2008;47(3):303-327.
4. McAviney J, et al. Cervical spine degenerative changes and their clinical significance. Spine J. 2010;10(5):467–474.