

MEASLES COMPLICATED BY MYELITIS

CAS-038

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Introduction

Measles is a highly contagious and immunising viral infectious disease caused by a virus called morbillivirus of the paramyxovirus family, which occurs worldwide and is responsible for some of the most dreadful complications. According to the World Health Organisation (WHO) and the US Centres for Disease Control and Prevention, the prevalence of measles cases is estimated to be 10.3 million in 2023, a 20% increase from 2022. However, those most at risk of complications from measles are children under 5 years of age, the elderly, pregnant women, and those with weakened immune systems due to HIV or other diseases.

Objective

Report a case of measles with spinal cord involvement in a patient

Case Presentation

This was a 37-year-old female patient, previously treated for measles, who was admitted for paresthesia of both lower limbs with vesico-sphincter disorders that appeared 8 days after treatment. Neurological examination revealed hypotonia of both lower limbs with superficial hypoesthesia; osteotendinous reflexes were present in all four limbs, and movement coordination was intact. The cerebrospinal fluid analysis revealed a clear fluid with 10 cells per mm³, a high level of proteinuria at 1.35 g/L, and a high level of glycorrachia 0.63 g/L. The spinal cord MRI showed a nodular lesion in the C7 vertebral body, presenting an isosignal on T2, a hypersignal on T2, and a signal on STIR. These findings suggest the presence of a vertebral angioma associated with myelitis. Serology tests for measles were positive, showing both IgG and IgM. The patient experienced partial functional recovery with corticosteroid therapy and required rehabilitation sessions for complete restoration of motor function.

Discussion

Among the most serious complications of measles are neurological complications such as acute post-measles encephalomyelitis, subacute sclerosing panencephalitis, and inclusion body encephalitis. Myelitis is a rare neurological manifestation occurring during measles, but with various etiologies such as autoimmune, inflammatory, or infectious diseases. The first symptoms are often paresthesias ascending from the feet coupled with weakness and sphincter dysfunction; An MRI scan can rule out any traumatic causes, supplemented by a lumbar puncture to detect signs of inflammation in the cerebrospinal fluid, indicating an infectious cause.



Figure1: Sagittal medullar MRI: Extended cervical hypersignal over the height of two vertebrae (C6 and C7) with slight swelling of the spinal cord

Conclusion

Even with the introduction of vaccinations, measles continues to have high rates of illness and death. The disease can lead to severe complications, such as myelitis, which can be effectively treated and managed through functional rehabilitation. Diagnosis typically involves an MRI scan of the spinal cord.

Bibliographic

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