

**Measles-mumps-and-rubella-virus-vaccine****S****Aseptic meningitis: case report**

A 31-year-old man developed aseptic meningitis during treatment with measles-mumps-and-rubella-virus-vaccine.

The man with no former medical and surgical history presented to the emergency room with an acute headache for 5 days in 2020. He noticed symptoms initially while lifting weights at the gymnasium. The headache was localised frontally. The pain was described as sharp and non-pulsating in nature and 10/10 in intensity. It worsened gradually, and was associated with nausea and one episode of nonbilious, non-bloody vomiting. He took over-the-counter unspecified NSAIDs for the headaches with no significant improvement. He denied any recent trauma, viral illness, sick contacts, blurred vision, photophobia, diplopia, tinnitus, hearing loss, neck stiffness, ataxia, focal motor or sensory, neurological deficits, fever, cough, chills, abdominal or chest pain, alteration in bowel habits, personal or family history of stroke and autoimmune diseases. He had been healthy and took no medications. He was up to date with his vaccinations, and received his measles-mumps-and-rubella-virus-vaccine [Merck Pharmaceuticals; *route and dosage not stated*] in the previous week as part of his workplace requirement. He reported two dermatomal varicella-zoster virus infection episodes in the past, first during childhood and second at 29 years. There were no other complications, and the recovery was uneventful. On physical examination, he appeared uncomfortable and complained of a persistent frontal headache. Vitals were found within normal limits, and physical examination was found unremarkable without any dermatomal rash. Signs of meningeal irritation were found negative. A COVID-19 PCR and COVID-19 antibody testing were also negative. A CT head and CT angiogram head and neck were unremarkable. Lumbar puncture was performed, which revealed elevated proteins and mononuclear cells with a lymphocytic predominance on initial studies suggestive of viral meningitis.

The man received empiric coverage of aciclovir [acyclovir] and ceftriaxone based on cytology of lumbar puncture studies. He reported an improvement of his symptoms on hospital day 2 with an appropriate pain control regimen. A CSF PCR studies were positive for Varicella-zoster virus PCR and negative for Herpes Simplex Virus 1 and 2. A final diagnosis of measles-mumps-and-rubella-virus-vaccine-induced aseptic meningitis [*duration of treatment to reaction onset not stated*]. Varicella-zoster virus IgG came back positive. Aciclovir with appropriate hydration was continued. His headache resolved gradually, and he was discharged home on hospital day 4 with acyclovir. He was followed up after discharge, and was doing well with complete resolution of symptoms.

Sahra S, et al. Case report: aseptic meningitis secondary to varicella-zoster virus (VZV) without an exanthem post MMR vaccination. BMC Infectious Diseases 21: 746, No. 1, Dec 2021. Available from: URL: <http://www.biomedcentral.com/bmcinfectedis/>

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