Sir,

Meningitis and encephalitis are serious diseases with high morbi-mortality, especially in bacterial meningitis. Rapid identification of causative pathogens and prompt instauration of an appropriate antimicrobial therapy are crucial to reduce the morbi-mortality, length hospital stay and healthcare costs associated with these syndromes [1, 2]. Differential diagnostic between bacterial and aseptic meningitis is difficult; the former is a medical emergency that requires prompt recognition and treatment, while the latter is a relatively common and often-beni-nen infection mainly caused by viruses [3, 4]. Consequently, cerebrospinal fluid (CSF) indices and microbiological studies are required to identify the etiologic agent [1, 2]. The classic diagnostic is based on a CSF Gram stain with culture and specific viruses PCR, which can delay the diagnostic [2]. Recently, USA Food and Drug Administration (FDA) has approved the FilmArray Meningitis/Encephalitis (ME) panel (bioMérieux, Marcy l’Etoile, France) to detect central nervous system (CNS) infections. The FilmArray ME panel is a multiplex PCR that can identify the most frequent causative agents of CNS infections in an one-step assay, which decreases the diagnostic time [1, 2].

Herein, an uncommon case of aseptic meningitis due to herpes simplex virus type 2 (HSV-2) is presented as well as the usefulness of the FilmArray ME panel in prompt diagnostic, the optimization of antimicrobial therapy and the implementation of infection prevention measures.

A 25-year old man was admitted in our department with a 2-day history of general discomfort, fever, photophobia, nausea and acute headache. One week before admission, he was treated with oral amoxicillin/clavulanic acid for five days, up until 72 hours before hospital admission.

The admission physical exam showed increased body temperature (37.6°C), tachycardia and mild neck stiffness. CSF drawn on admission contained 852 cells/μL (100% lymphocytes), elevated protein (143 mg/dL), normal adenosine deaminase level (5.1 U/L) and normal glucose level (55 mg/dL in CSF and 120 mg/dL in serum). The Gram’s stain was negative. Intravenous antimicrobial therapy with acyclovir and ceftriaxone, 750 mg/8h and 2g/12h respectively, were immediately administered and the patient was placed under contact isolation.

The CSF analysis was conducted in the microbiology laboratory as follows: Firstly, CSF was analysed for enterovirus detection by targeted testing platform Xpert EV PCR (Cepheid, Sunnyvale, CA, USA), yielding negative results. At this point, a CSF aliquot was sent to a reference center (Hospital Universitario Donostia) in which FilmArray ME assay was performed. A few hours after the patient’s admission, the FilmArray ME assay showed a positive result to HSV-2 being negative to bacterial targets. The patient’s measures of contact isolation and ceftriaxone administration were disrupted after learning these results. Retrospectively, the patient admitted unprotected oral sex with his couple, but he did not remember any initial cutaneous or mucosal lesion. Screening for sexually transmitted infections and urogenital HSV detection of the patient was accomplished (table 1). The patient was discharged without symptoms after 14 days of intravenous acyclovir therapy.

HSV is the most frequent agent of viral meningitis, followed by varicella zoster virus and HSV-2 [5]. Nonetheless, the prevalence of HSV-2 meningitis in Spain, is very low (1.2%), with few cases reported in the literature [5–7]. Infection with HSV-2 is mucocutaneous and is acquired vertically as a neonate or as an adult principally through sexual activity [8]. Moreover, HSV-2 is a recognized cause of CNS infection, mainly meningitis and it is also related to benign recurrent meningitis [8]. CNS infection due to HSV-2, usually correspond to the reactivation of a latent virus in sensory ganglia, mostly in young females [8, 9]. As shown in previous reports, only 30% of the...
The authors declare that they have no conflicts of interest.

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