

Toscana virus: mediteranski flebovirus kao uzročnik teškog aseptičnog meningitisa

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KLJUČNE RIJEČI: glavobolja; meningitis; flebovirus

UVOD: Toscana virus je flebovirus koji se prenosi ugrizom nevida. Ova infekcija prevladava u zemljama koje graniče sa Sredozemnim morem, gdje može uzrokovati veliki broj različitih neuroloških simptoma.

Prikazujemo pacijenticu koja je bolovala od teškog seroznog meningitisa uzrokovanog Toscana virusom.

PRIKAZ SLUČAJA: Prethodno zdrava 17-godišnja pacijentica javila se s jakom glavoboljom koja je započela okcipitalno i proširila se na desno frontotemporalno područje, praćena mučninom i povraćanjem. Posljednja 2 tjedna imala je glavobolje, ali nisu bile tako jake i uspješno su kupirane analgeticima. Nitko u njezinoj okolini nije prijavio slične simptome. Na pregledu je bila subfebrilna (37,6 °C), imala je pozitivne meningealne znakove, jaku fotofobiju, audiofobiju, blagi tremor jezika i blagu dismetriju lijeve ruke. MR glave nije pokazao radiološke znakove meningitisa ili encefalitisa. Napravljena je lumbalna punkcija koja je pokazala povišene razine proteina (1.14 g/L) i povećan broj stanica (1760/3 x 10⁶/L, dominantno limfocita). Započeto je simptomatsko liječenje u kombinaciji s ceftriaksonom, ampicilinom i aciklovirom sve do prispjeća negativnih nalaza na HSV1, HSV2, *Listeria monocytogenes* i serološki rezultati za *Borrelia burgdorferi* uz ostale relevantne mikrobiološke nalaze. Došlo je do postupne, ali kompletne regresije simptoma. Pristigli serološki rezultati ukazivali su na akutnu infekciju Toscana virusom (IFA IgM pozitivan 1000, IgG pozitivan 10000), a ponovljeni serološki test nakon 3 tjedna potvrdio je 10 puta povišen titar protutijela (IgM 10000, IgG 100000).

ZAKLJUČAK: U mediteranskom području potrebno je posumnjati na Toscana virus, posebno u slučajevima ljetnog meningitisa kada su isključeni drugi uobičajeni uzročnici.

Toscana virus: Mediterranean phlebovirus as a cause of severe aseptic meningitis

INTRODUCTION: Toscana virus is a phlebovirus transmitted by the bite of hematophagous sandflies. This infection is prevalent in countries bordering the Mediterranean Sea, where it can cause a large variety of neurological symptoms. We present a patient who suffered from severe case of aseptic meningitis caused by the Toscana virus.

REPORT: A previously healthy 17-year-old patient presented with severe headache which started occipitally and spread to the right frontotemporal area, accompanied with nausea and vomiting. For the last 2 weeks, she had headaches, but they were not this severe and were successfully managed with analgetics. No one in her surroundings reported similar symptoms. On examination, she was subfebrile (37.6 °C), demonstrated positive meningeal signs, severe photophobia, audiophobia, mild tongue tremor, and mild left hand dysmetria. MR of the head showed no radiologic signs of meningitis or encephalitis. The lumbar puncture was performed and showed elevated protein levels (1.14 g/L) with an increased number of cells (1760/3 x 10⁶/L, predominantly lymphocytes). Symptomatic treatment combined with ceftriaxone, ampicillin and acyclovir was initiated until PCR results for HSV1, HSV2, *Listeria monocytogenes* and serology results for *Borrelia burgdorferi*, as well as other relevant microbiological results came back negative. Her symptoms gradually, but completely improved. Positive serology results were consistent with acute Toscana virus infection (IFA IgM positive 1000, IgG positive 10000), and repeated serologic tests after 3 weeks confirmed 10 times the elevation of antibody titer (IgM 10000, IgG 100000).

CONCLUSION: In the Mediterranean area, the Toscana virus should be suspected, especially in summer meningitis cases when other common pathogens are excluded.

KEYWORDS: headache; meningitis; phlebovirus

