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ePoster Viewing

Clinical ID: community-acquired infections including CAP, sepsis, STD, ...

Severe neurological complications of varicella

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Objective: The aim of the study was to evaluate the incidence, clinical manifestations and outcomes of neurological complications secondary to varicella in unvaccinated, HIV negative hospitalized patients. **Methods:** Retrospective study on patients with severe neurological complications related to varicella admitted in a single infectious diseases center between 01.01.2013 and 31.12.2013. **Results:** Out of 1773 patients with varicella diagnosed in our hospital during the study period, 183 (13.3%) were hospitalized and of these 10 (5.46%) had central nervous system involvement (9 meningitis or meningo-encephalitis and one polyradiculoneuropathy). The majority were males (8), from urban areas (8), aged from 4 to 38 years (median 7 years) and with no history of vaccination against varicella. The most frequent clinical manifestations were: ataxia in 8 cases, vomiting and headaches (7), fever and seizures (6), altered mental status (4) and dizziness and slurred speech (3). CSF analysis showed mild-to-moderate lymphocytic pleocytosis (median 55 cells/ μ L) in 6 patients and elevated protein levels in one case. The median period of hospitalisation was 11 days [4-24] and the median time between rash appearance and the onset of the neurological manifestations was 3 [0-8] days. The patient with polyradiculoneuropathy had positive VZV-DNA in CSF and both IgM and Ig G VZV antibodies in plasma, but no VZV antibodies were found in CSF. Brain imaging was abnormal in 3 of 9 patients, and showed encephalitis of the cerebellum, acute inflammatory central lesions and lumbar-sacral arachnoiditis (in the patient with polyradiculoneuropathy). The outcome under treatment with intravenous acyclovir, corticotherapy, intravenous immunoglobulins, anticonvulsivants was favorable without sequelae in 8 patients. There was one death in a child with an underlying immunodeficiency condition (acute lymphoblastic leukemia) and late initiation of antiviral therapy (after 6 days of onset) and another child developed cavernous sinus thrombosis with slow recovery in a neuropediatric service. **Conclusions:** The incidence of neurological complications secondary to varicella in hospitalized patients was less frequent compared to the literature data. The outcome of neurological complications was favorable in immunocompetent patients without apparent long-term sequelae. A decrease in the morbidity of neurological complications of varicella will be possible with high vaccination coverage.