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BOOK OF ABSTRACTS

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P29 Severe Tick-borne encephalitis in a teenage boy – early and late neurological sequelae

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Introduction. Tick-borne encephalitis (TBE), is an infection by the Tick-borne encephalitis virus (TBEV) resulting in symptoms of central nervous system inflammation. TBEV infection can follow symptoms ranging from febrile illness, mild meningitis to severe encephalitis, and even death. Although childhood TBE is considered to be a mild condition with favorable outcome compared to adults, data presented here suggest that severe neurological forms can also occur in pediatric population.

Case report description. A 15 year-old, previously healthy teenage boy was admitted to Children's Clinical University Hospital, Riga, Latvia in September 2021 due to headache, fever, nausea, vomiting and nuchal rigidity. Patient was not vaccinated against TBE. TBE was confirmed by positive both TBEV-specific IgM and IgG antibodies in serum and positive TBEV-specific IgM antibodies in the cerebrospinal fluid. Patient's initial diagnosis was TBE meningitis and he received symptomatic treatment, however, his clinical condition deteriorated into a severe meningo-encephalitis. Patient was admitted to intensive care unit (ICU) due to bulbar palsy, respiratory failure and tetraparesis. Total hospital stay was 68 days, including 10 days at ICU. Patient was discharged with mixed-type tetraparesis, tracheostoma and PEG feeding tube under palliative care. Neurological follow-up after 1 year still showed incomplete recovery – 4th grade paresis in both legs (dx>sin) and proximal muscular weakness in both arms.

Conclusions. Tick-borne encephalitis has an unpredictable clinical course. Potentially life-threatening neurological illness with long-term consequences can also follow in children. The importance of vaccination against TBE, as the most effective prevention method, should be stressed out in all age groups.