



P 26 Tick-borne encephalitis morbidity in the north-east of Poland in the years preceding the 1993 outbreak

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The increase in tick-borne encephalitis (TBE) morbidity was observed in central Europe after the year 1990, in Poland occurring abruptly in 1993. This coincided with much improved access to the serologic testing for TBE, facilitating a formal confirmation of the diagnosis in suspected cases. We attempted to verify if TBE mortality reported from the north-east of Poland in the years preceding the 1993 increase could have been underestimated due to limitations in serologic testing.

We analysed the records of the Reference Department for Neuroinfections in Białystok, identifying cases of lymphocytic meningitis/encephalitis of unknown aetiology registered in 1988–1989. We then compared their number, spatial and temporal distribution with the serologically confirmed cases of TBE from 1993 to 1999 from the same setting.

In 1993–1999, there was a median of 40 confirmed TBE cases per year ($n=11-62$) and less than 10 cases of unspecified lymphocytic meningitis/encephalitis (seronegative for TBE) each year. In 1988–1989, there were lower numbers of cases of unspecified lymphocytic meningitis/encephalitis than TBE alone – 35 in 1988 and 10 in 1989. The seasonal distribution of these cases followed the trend typical for TBE, with a majority in July/August (55% versus 54% of TBE cases from 1993 to 1999) and a secondary peak in September/October (25% versus 26%). Nineteen patients (42%) came from rural communities adjacent to the large woodland complex of Knyszyn Forest, which also contributed 44% of TBE cases in 1993–1999. This pattern strongly suggests that most of these cases in fact represent serologically unconfirmed TBE.

The increase in TBE morbidity in the studied area from 1993 onward is evident. However, the cases reported in the preceding decade as unspecified lymphocytic meningitis/encephalitis from the endemic locations and high-risk populations seem to represent, in majority, TBE, and should be taken into consideration when assessing long-term trends in TBE occurrence.