



INCREASE OF TBE CASES IN FRANCE

Background

France is the westernmost European country, where TBE occurs. However, only a low number of TBE cases has been reported in France during the last decade. In France, since 1968, a total of 171 TBE cases have been reported. About 10 TBE cases occurred annually, mainly in the Alsace region (northeastern France, close to Germany). In addition, one or two cases were reported each year in the French Alpine region since 2003, and one TBE case has been notified in Southwestern France near Bordeaux.

Results

Velay et al (2018) described a four-year study from 2013 to 2016, dealing with the epidemiology of TBE and clinical analysis of TBE-confirmed cases in France. Between 2013 and 2016, a total number of 54 cases has been notified in France, four in 2013, ten in 2014, eleven in 2015, and twenty-nine cases in 2016. Like in other European countries, most of the cases occurred between April and October. While six of the 54 infections have been attracted abroad, 43 of the autochthonous 48 TBE cases occurred in the Alsace region reaching an incidence of 1.33 cases per 100,000 inhabitants in that region. Five cases occurred around Annecy in the Alpine region. Most of the infections were acquired during leisure activity and one case was most likely an alimentary infection by consumption of unpasteurized goat milk.

Nearly all patients (53/54) were hospitalized and the mean duration was nine days. 24% of the patients suffered from meningitis and 61% consisted of meningo-encephalitis. None of them died. Lyme borreliosis tests have been performed in 87% of the patients, but no coinfection with *Borrelia burgdorferi* sensu lato has been diagnosed. Nine patients showed an incomplete recovery. Among 39 samples collected in 2016 by the Borrelia National Reference Center, one

sample of a patient with neurologic impairment (living in a non-endemic French region, around Lyon) was retrospectively found positive for TBE IgM and IgG.

Discussion

The significant increase of TBE cases has attracted attention and the Regional Health Agency (ARS Grand Est) issued a warning about TBE. While the Alsace region remained the area with the highest TBE incidence in France, an additional hotspot is the French Alpine region. In some counties of the Federal State of Baden-Wuerttemberg (Germany) neighbored to the Alsace region, the TBE incidence reach more than 5 per 100,000 inhabitants per five years. TBE remains probably underestimated in France outside the well-known endemic Alsace and Alpine region. In 2017, the number of reported TBE cases (at least 17 until December 2017, Velay and Hansmann, personal communication) was also on a much higher level compared to the approximately 10 cases yearly reported in the past, indicating that TBE seems to become an emerging public health issue in France. More data are needed about the epidemiology of TBE in France and the true burden of infection in this country.

Literature

Velay et al., A new hot spot for tick-borne encephalitis (TBE): A marked increase of TBE cases in France in 2016. Ticks Tick Borne Dis 2018, 9: 120-125

Author: Dr. Michael Bröker

Compiled: January 2018

Acknowledgement: The author is grateful to Aurélie Velay and Yves Hansmann for sharing unpublished data about TBE cases in 2017 in France.