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Clinical characteristics and management of neurocysticercosis patients: a retrospective assessment of case reports from Europe

Dominik Stelzle, MD, Annette Abraham, MPH, Miriam Kaminski, MD, Veronika Schmidt, PhD, Robert De Meijere, MD, Javier A Bustos, PhD, Hector Hugo Garcia, PhD, Priyadarshi Soumyaranjan Sahu, PhD, Branko Bobić, PhD, Carmen Cretu, PhD, Peter Chiodini, PhD, Veronique Dermauw, PhD, Brecht Devleesschauwer, PhD, Pierre Dorny, PhD, Ana Fonseca, PhD, Sarah Gabriël, PhD, Maria Ángeles Gómez Morales, PhD, Minerva Laranjo-González, PhD, Achim Hoerauf, PhD, Ewan Hunter, MD, Ronan Jambou, PhD, Maja Jurhar-Pavlova, PhD, Ingrid Reiter-Owona, DVM, Smaragda Sotiraki, PhD, Chiara Trevisan, PhD, Manuela Vilhena, PhD, Naomi F Walker, PhD, Lorenzo Zammarchi, MD, Andrea Sylvia Winkler, PhD
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Abstract

Objectives

Neurocysticercosis (NCC) is a parasitic disease caused by the larval stage of the tapeworm *Taenia solium*. NCC mainly occurs in Africa, Latin America and South-East Asia and can cause a variety of clinical signs/symptoms. Although it is a rare disease in Europe, it should nonetheless be considered as a differential diagnosis. The aim of this study was to describe clinical characteristics and management of patients with NCC diagnosed and treated in Europe.

Methods

We conducted a systematic search of published and unpublished data on patients diagnosed with NCC in Europe (2000–2019) and extracted demographic, clinical and radiological information on each case, if available.

Results

Out of 293 identified NCC cases, 59% of patients presented initially with epileptic seizures (21% focal onset); 52% presented with headache and 54% had other neurological signs/symptoms. The majority of patients had a travel or migration history (76%), mostly from/to Latin America (38%), Africa (32%) or Asia (30%). Treatment varied largely depending on cyst location and number. The outcome was favorable in 90% of the cases.

Conclusions

Management of NCC in Europe varied considerably but often had a good outcome. Travel and migration to and from areas endemic for *T. solium* will likely result in continued low prevalence of NCC in Europe. Therefore, training and guidance of clinicians is recommended for optimal patient management.