

Histological examination of post-mortem brains of children with nodding syndrome

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We read with interest the editorial by Boivin about the aetiology of nodding syndrome (1). In this paper the author mentions that histological examination of post-mortem brains of children with nodding syndrome revealed polarizable material which proved difficult to characterize or identify in the majority of specimens (1). We recently performed a post-mortem study on a person with nodding syndrome in Uganda but we did not observe polarized material in the brain. Moreover, these polarized crystal-like structures were not described on MRI scans of persons with nodding syndrome (2), suggesting that they appeared post mortem. Indeed, polarized material has been seen in brain tissue that was not processed in an appropriate way and these crystalized structures have been called Buscaino bodies, representing myelin altered by fixation and handling (3). This was most likely what happened with previous post-mortem studies performed in patients with nodding syndrome. During these studies the composition of the formaldehyde used in preserving these brains was not documented.

Currently, in onchocerciasis endemic districts of northern Uganda, a state of the art post-mortem study is ongoing, investigating the histopathological abnormalities in the brains of persons with epilepsy, including nodding syndrome. Hopefully this study will help us to obtain a

better understanding of how the *Onchocerca volvulus* parasite is able to cause epilepsy.

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Footnote

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