The role of surgery in the management of neurocysticercosis

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To the Editor—The report from Ng et al[1] is a timely reminder of the diverse presentation of neurocysticercosis (NCC), the most prevalent parasitic disease of the central nervous system and the most common preventable cause of epilepsy worldwide.[1,2]

Recent advances in our understanding of this disease have guided physicians in the diagnosis of NCC based on epidemiological, radiological, and clinical data. This has greatly diminished the role of diagnostic surgery, typically limited to cases of atypical solitary cysticercus granuloma. Surgery for parenchymal NCC is primarily indicated for large parenchymal colloidal cyst causing mass effect; intractable epilepsy secondary to NCC and in practice is mainly 'restricted to placement of ventricular shunts for hydrocephalus'.[3]

Routine evaluation includes relevant epidemiological information, search for subretinal parasites by fundoscopic examination and X-rays to look for calcified cysticerci and serum anticysticercal antibodies.[4] These would usually allow a diagnosis to be made without craniotomy.

In the case described by Ng et al,[1] criteria for definitive diagnosis had already been fulfilled: cranial magnetic resonance imaging demonstrated pathognomonic features of a typical single enhancing cyst with perilesional oedema and radiographical evidence of a scolex. The presence of an absolute diagnostic criterion, supported by clinical and epidemiological data, would have safely allowed for empirical medical therapy and observation for lesion disappearance or reduction with antiparasitic treatment, perhaps forgoing the need for invasive neurosurgical procedures and accompanying costs, complications, and discomfort.[5]

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