Unusual Manifestations of Neurocysticercosis in MR Imaging: Analysis of 172 Cases

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Purpose
The typical manifestations of neurocysticercosis are described widely in the literature. The purpose of this study is to demonstrate the uncommon presentations of different forms of neurocysticercosis in MR imaging.

Materials & Methods
A retrospective analysis of 172 cases of neurocysticercosis in MR studies was carried out over a period of 13 years. One hundred and four males and 68 females with a mean age of 32 ± 3.7 years were studied. The studies were performed on 1.5 T GE MR units and T1 was used before and after gadolinium injection, T2 and gradient-echo (T2*) sequences.

Results
The authors divided the unusual manifestations of neurocysticercosis into: intraventricular, subarachnoid, spinal, orbital, intraparenchymatous, and reactivation of previously calcified lesions. The results obtained were: intraparenchymatous [95 cases (55.23%)], intraventricular [27 cases (15.69%)], subarachnoid [20 cases (11.63%)], spinal [6 cases (3.49%)], orbital [1 case (0.58%)], reactivated lesion [1 case (0.58%)], association of intraventricular and intraparenchymatous [12 cases (6.98%)], association of subarachnoid and intraparenchymatous [6 cases (3.49%)], association of subarachnoid and intraventricular [4 cases (2.32%)].

Conclusion
MR imaging is a sensitive and specific method in the analysis of different forms of unusual manifestations of neurocysticercosis, which should appear in the differential diagnosis of parenchymal, ventricular, spinal, cisternal, and orbital lesions.