

Combined Encephalopathies in Severe Malnutrition and Liver Abscess Treated with Metronidazole

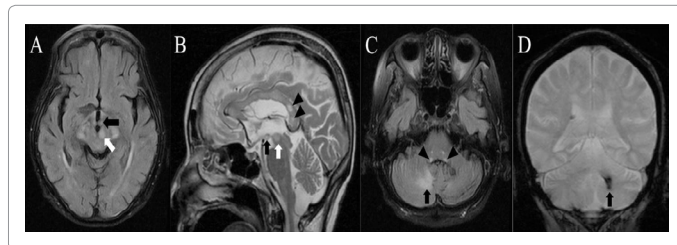
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Case Summary

A 69-year-old woman presented with deterioration of level of consciousness and ataxia for 2 weeks. She was diagnosed pyogenic liver abscess 3 months ago and had developed severe malnutrition since then. Liver abscess was successfully treated with ceftriaxone and metronidazole 1 month ago. Drowsiness, horizontal nystagmus, cerebellar dysarthria and ataxia were observed. She was clinically diagnosed Wernicke's encephalopathy (WE). Interestingly, her brain MRI showed a combination of typical finding [1] including mammillary bodies (Figure 1A and 1B; black arrow), and pontine tegmentum hyperintensities (Figure 1C; head arrow). Atypical findings of red nucleus (Figure 1A; white arrow), splenium (Figure 1B; head arrow), and dentate nucleus hyperintensities (Figure 1C; black arrow) of WE which were described in metronidazole-induced encephalopathy (MIE) [2]. Gradient echo sequence showed small bleeding in left dentate nucleus (Figure 1D; arrow). Combined WE with MIE were diagnosed. All neurological symptoms were disappeared after intravenous infusion of thiamine. Combined WE and MIE are a rare condition but they can concomitantly occur in the setting of severe malnutrition with history of taking metronidazole. In addition, bbleeding in dentate nucleus has never been described in literature.



Reference

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