REVERSIBLE SPLENIAL LESION IN PEDIATRIC CEREBRAL MALARIA

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Introduction: Cerebral malaria (CM) is a severe complication of Plasmodium Falciparum (P.F.) infection. We describe the first pediatric case of reversible lesion involving the splenium of corpus callosum (RLSCC) in cerebral malaria.

Case report: An 18-month-old African child, recently been in Burkina Faso and Ghana without performing antimalarial prophylaxis, was admitted to our Hospital because of fever, vomits and diarrhoea. She was poorly reactive with neck stiffness and mild liver enlargement. Laboratory tests: WC 16310/mm3 (N63%), Hb 7.5 g/dl, MCV 71.5 fL, Plt 49.000/mm3, CRP 251 mg/l, blood smear positive for P.F. (parasitaemia at 3% level). The child presented sensory deterioration; Hb decreased to 5.9 mg/dl despite treatment with quinine and clindamycin. She was intubated and admitted to our Intensive Care Unit (PICU): she was transfused and extubated the same day. Few hours later, the patient showed episodic clonic limb movements treated with lorazepam and phenobarbital. Lumbar puncture was negative, blood and fecal cultures were positive for Salmonella. Brain magnetic resonance imaging (MRI) showed edema with supra-tentorial white matter T2 hyperintensity, sparing "U" fibres. On diffusion-weighted imaging (DWI) the involved areas appeared markedly hyperintense with reduction of apparent diffusion coefficient (ADC) values. After 2 days, the child was transferred to the Pediatric Emergency department, in good general conditions; a week later she was discharged. Follow-up Brain MRI, performed 10 days from clinical onset, was normal.

Conclusion: RLSCC can be present in pediatric cerebral malaria. It is not correlated to a poor prognosis.