

- logy. 2000;55(5):616–23.
7. Pohlmann-Eden B, Beghi E, Camfield C, Camfield P. The first seizure and its management in adults and children. *BMJ*. 2006;332(7537):339–42.
 8. Auvin S, Walls E, Sabouraud P, Bednarek N, Villeneuve N, Vallée L, et al. [Management of the first nonfebrile seizure in infants and children]. *Arch Pediatr*. 2008;15(11):1677–84.
 9. Pohlmann-Eden B, Beghi E, Camfield C, Camfield P. The first seizure and its management in adults and children. *BMJ*. 2006;332(7537):339–42.
 10. Arts WF, Geerts AT. When to start drug treatment for childhood epilepsy: the clinical-epidemiological evidence. *Eur J Paediatr Neurol*. 2009;13(2):93–101.
 11. Stroink H, Brouwer OF, Arts WF, Geerts AT, Peters AC, van Donselaar CA. The first unprovoked, untreated seizure in childhood: a hospital based study of the accuracy of the diagnosis, rate of recurrence, and long term outcome after recurrence. Dutch study of epilepsy in childhood. *J Neurol Neurosurg Psychiatr*. 1998;64(5):595–600.
 12. González G, Cerisola A. Primera convulsión en apirexia. *Arch Pediatr Urug*. 2002;73(4):233–5.
 13. Shinnar S, Berg AT, Moshe SL, O'Dell C, Alemany M, Newstein D, et al. The risk of seizure recurrence after a first unprovoked afebrile seizure in childhood: an extended follow-up. *Pediatrics*. 1996;98(2 Pt 1):216–25.
 14. Scutoni AE, Manreza MLG, Guerreiro MM. Recurrence after a first unprovoked cryptogenic/idiopathic seizure in children: a prospective study from São Paulo, Brazil. *Epilepsia*. 2004;45(2):166–70.
 15. Ramos-Lizana J, Aguirre-Rodríguez J, Aguilera-López P, Cassinello-García E. Recurrence risk after a first remote symptomatic unprovoked seizure in childhood: a prospective study. *Dev Med Child Neurol*. 2009;51(1):68–73.
 16. Arthur TM, deGrauw TJ, Johnson CS, Perkins SM, Kalnin A, Austin JK, et al. Seizure recurrence risk following a first seizure in neurologically normal children. *Epilepsia*. 2008;49(11):1950–4.
 17. Winckler MIB, Rotta NT. Clinical and electroencephalographic follow-up after a first unprovoked seizure. *Pediatr Neurol*. 2004;30(3):201–6.
 18. Nicole-Carvalho V, Henriques-Souza AM de M. [Management of the first convulsive seizure]. *J Pediatr (Rio J)*. 2002;78 Suppl 1:S14–18.
 19. Hamiwka LD, Singh N, Niosi J, Wirrell EC. Diagnostic inaccuracy in children referred with "first seizure": role for a first seizure clinic. *Epilepsia*. 2007;48(6):1062–6.
 20. Hsieh DT, Chang T, Tsuchida TN, Vezina LG, Vanderver A, Siedel J, et al. New-onset afebrile seizures in infants: role of neuroimaging. *Neurology*. 2010;74(2):150–6.
 21. Descher JS, deGrauw TJ, Musick BS, Dunn DW, Kalnin AJ, Egelhoff JC, et al. Magnetic resonance imaging (MRI) and electroencephalographic (EEG) findings in a cohort of normal children with newly diagnosed seizures. *J Child Neurol*. 2006;21(6):491–5.
 22. Schreiner A, Pohlmann-Eden B. Value of the early electroencephalogram after a first unprovoked seizure. *Clin Electroencephalogr*. 2003;34(3):140–4.
 23. King MA, Newton MR, Jackson GD, Fitt GJ, Mitchell LA, Silvapulle MJ, et al. Epileptology of the first-seizure presentation: a clinical, electroencephalographic, and magnetic resonance imaging study of 300 consecutive patients. *Lancet*. 1998;352(9133):1007–11.
 24. DeRoa ST, Chillag KL, Keeler M, Gilbert DL. Effects of sleep deprivation on the pediatric electroencephalogram. *Pediatrics*. 2009;123(2):703–8.
 25. Sadleir LG, Scheffer IE. Optimizing electroencephalographic studies for epilepsy diagnosis in children with new-onset seizures. *Arch Neurol*. 2010;67(11):1345–9.
 26. Gaillard WD, Chiron C, Cross JH, Harvey AS, Kuzniecky R, Hertz-Pannier L, et al. Guidelines for imaging infants and children with recent-onset epilepsy. *Epilepsia*. 2009;50(9):2147–53.
 27. Kalnin AJ, Fastenau PS, deGrauw TJ, Musick BS, Perkins SM, Johnson CS, et al. Magnetic resonance imaging findings in children with a first recognized seizure. *Pediatr Neurol*. 2008;39(6):404–14.
 28. Landau YE, Waisman Y, Shuper A. Management of children with nonfebrile seizures in the emergency department. *European Journal of Paediatric Neurology*. 2010;14(5):439–44.
 29. Beghi E. General conclusions and recommendations. *Epilepsia*. 2008;49:58–61.
 30. Yılmaz U, Yılmaz TS, Dizdarer G, Akıncı G, Güzel O, Tekgül H. Efficacy and tolerability of the first antiepileptic drug in children with newly diagnosed idiopathic epilepsy. *Seizure* 2013;
 31. Hirtz D, Berg A, Bettis D, Camfield C, Camfield P, Crumrine P, et al. Practice parameter: treatment of the child with a first unprovoked seizure: Report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. *Neurology*. 2003;60(2):166–75.
 32. Haut SR, Shinnar S. Considerations in the treatment of a first unprovoked seizure. *Semin Neurol*. 2008;28(3):289–96.
 33. Musicco M, Beghi E, Solari A, Viani F. Treatment of first tonic-clonic seizure does not improve the prognosis of epilepsy. First Seizure Trial Group (FIRST Group). *Neurology*. 1997;49(4):991–8.
 34. Marson A, Jacoby A, Johnson A, Kim L, Gamble C, Chadwick D, et al. Immediate versus deferred antiepileptic drug treatment for early epilepsy and single seizures: a randomised controlled trial. *Lancet*. 2005;365(9476):2007–13.
 35. Marson AG. When to start antiepileptic drug treatment and with what evidence? *Epilepsia*. 2008;49:3–6.
 36. Camfield P, Camfield C. Special considerations for a first seizure in childhood and adolescence. *Epilepsia*. 2008;49 Suppl 1:40–4.
 37. Shinnar S, Berg AT, Moshe SL, Shinnar R. How long do new-onset seizures in children last? *Ann Neurol*. 2001;49(5):659–64.
 38. Berg AT, Shinnar S, Testa FM, Levy SR, Frobish D, Smith SN, et al. Status epilepticus after the initial diagnosis of epilepsy in children. *Neurology*. 2004;63(6):1027–34.
 39. Berg AT, Shinnar S, Levy SR, Testa FM. Status epilepticus in children with newly diagnosed epilepsy. *Ann Neurol*. 1999;45(5):618–23.
 40. Sillanpää M, Shinnar S. Status epilepticus in a population-based cohort with childhood-onset epilepsy in Finland. *Ann Neurol*. 2002;52(3):303–10.
 41. Expert Committee on Pediatric Epilepsy, Indian Academy of Pediatrics. Guidelines for diagnosis and management of childhood epilepsy. *Indian Pediatr*. 2009;46(8):681–98.
 42. Wirrell EC, Camfield PR, Camfield CS, Dooley JM, Gordon KE. Accidental injury is a serious risk in children with typical absence epilepsy. *Arch Neurol*. 1996;53(9):929–32.
 43. Brodie MJ. Medical therapy of epilepsy: when to initiate treatment and when to combine? *J Neurol*. 2005;252(2):125–30.
 44. Newra T Rotta, Lygia Ohlweiler, Rudimar dos Santos Riesgo. Rotinas em Neuropediatria. 1o ed. Porto Alegre: Artmed; 2005.
 45. Gläuser T, Ben-Menachem E, Bourgeois B, Cnaan A, Chadwick D, Guerreiro C, et al. ILAE treatment guidelines: evidence-based analysis of anti-epileptic drug efficacy and effectiveness as initial monotherapy for epileptic seizures and syndromes. *Epilepsia*. 2006;47(7):1094–120.
 46. Ghaffarpour M, Pakdaman H, Harirchian MH, Omrani H-A, Ghabaei M, Zamani B, et al. Pharmacokinetic and pharmacodynamic properties of the new AEDs: A review article. *Iran J Neurol*. 2013;12(4):157–65.
 47. LaRoche SM, Helmers SL. The new antiepileptic drugs: scientific review. *JAMA*. 2004;291(5):605–14.
 48. Gläuser T, Ben-Menachem E, Bourgeois B, Cnaan A, Guerreiro C, Kälviäinen R, et al. Updated ILAE evidence review of antiepileptic drug efficacy and effectiveness as initial monotherapy for epileptic seizures and syndromes. *Epilepsia*. 2013;54(3):551–63.

ABSTRACT. There is no consensus in the literature about the conduct of the first seizure. In this issue, there are four key points: 1) the risk of recurrence; 2) when making the EEG; 3) when to do MRI; 4) when initiating treatment. Recurrence may happen in approximately 50% of cases. According to the majority of the publications, the EEG must be performed in all children with unprovoked seizures. The brain MRI is not mandatory for all cases, because only about 2-4% of the image tests made after seizures result in specific interventions. Both tests, together with the clinical evaluation, may help the decision to start treatment or not. Risk/benefit relation, risk of recurrence, and morbidity of seizures should be taken into account, although the decision of medication use should be individualized.

Keywords: *Electroencephalography, Epilepsy, Seizures.*