

The use of antiepileptics for seizure treatment and prophylaxis in patients diagnosed with cerebral toxoplasmosis: What should be started, when should they be started and how long should they be continued?

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Background

- Patients with cerebral toxoplasmosis (CT) are at high risk of seizures.
- National guidelines recommend antiepileptic medication if a patient presents with or develops seizures, but not for primary prophylaxis¹.
- The guidance does not extend to which medication to use or duration of therapy.

Objective

- To review the provision of antiepileptics in patients diagnosed with CT at our institution and evaluate adherence with national guidelines.

Methods

- In our HIV patient cohort, all CT cases diagnosed from January 1997 to August 2012 were identified through our electronic coding portal.
- A case note review was performed to identify the occurrence of seizures and the use, type and duration of antiepileptics.

Results

- 49 patients with CT identified.
- Age - Median 41 (range 25-54) years.
- Sex - 41% female, 59% male.
- CD4 cell count - Median 33 (range 0-219).
- Presentation - 60% had seizures at initial presentation (Fig.1)
- Antiepileptic therapy included Sodium Valproate, Phenytoin and Levitiracetam (Fig.2).

Provision of anti-epileptics

- 100% of patients presenting with seizures were commenced on antiepileptics upon admission or CT diagnosis
- 40% of cases where there was no history of seizures antiepileptics were prescribed as primary prophylaxis.

Duration and type of anti-epileptics

- Of those patients alive at the last visit 31% remained on antiepileptics and 31% had discontinued anti-epileptics. Median duration of treatment 17.5 months (range 5-84 months). Data was inconclusive for the remainder.
- Sodium Valproate was the most commonly prescribed antiepileptic. More recently we observed the increased use of Levitiracetam.

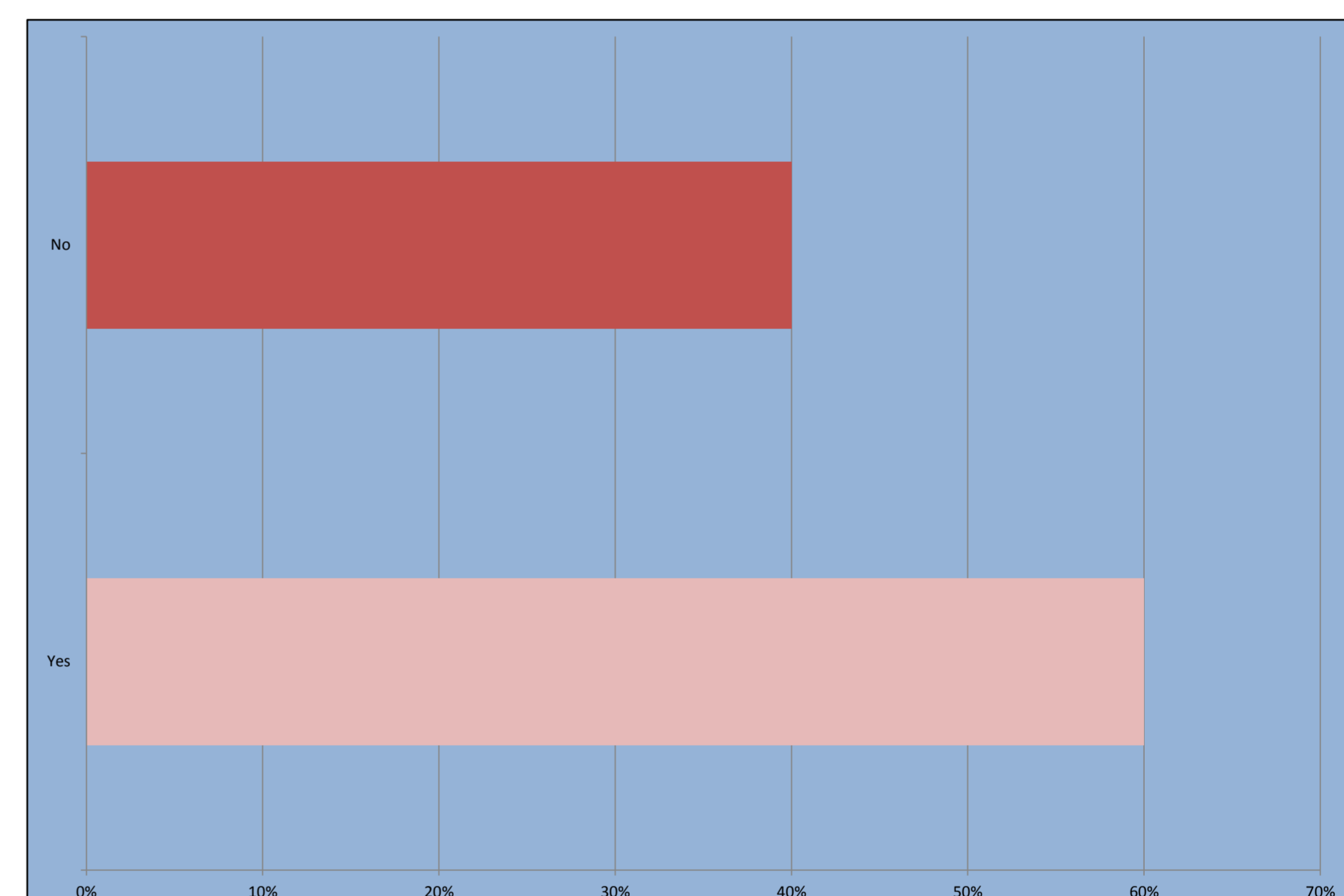


Figure 1:
Percentage of Patients Presenting with a Seizure

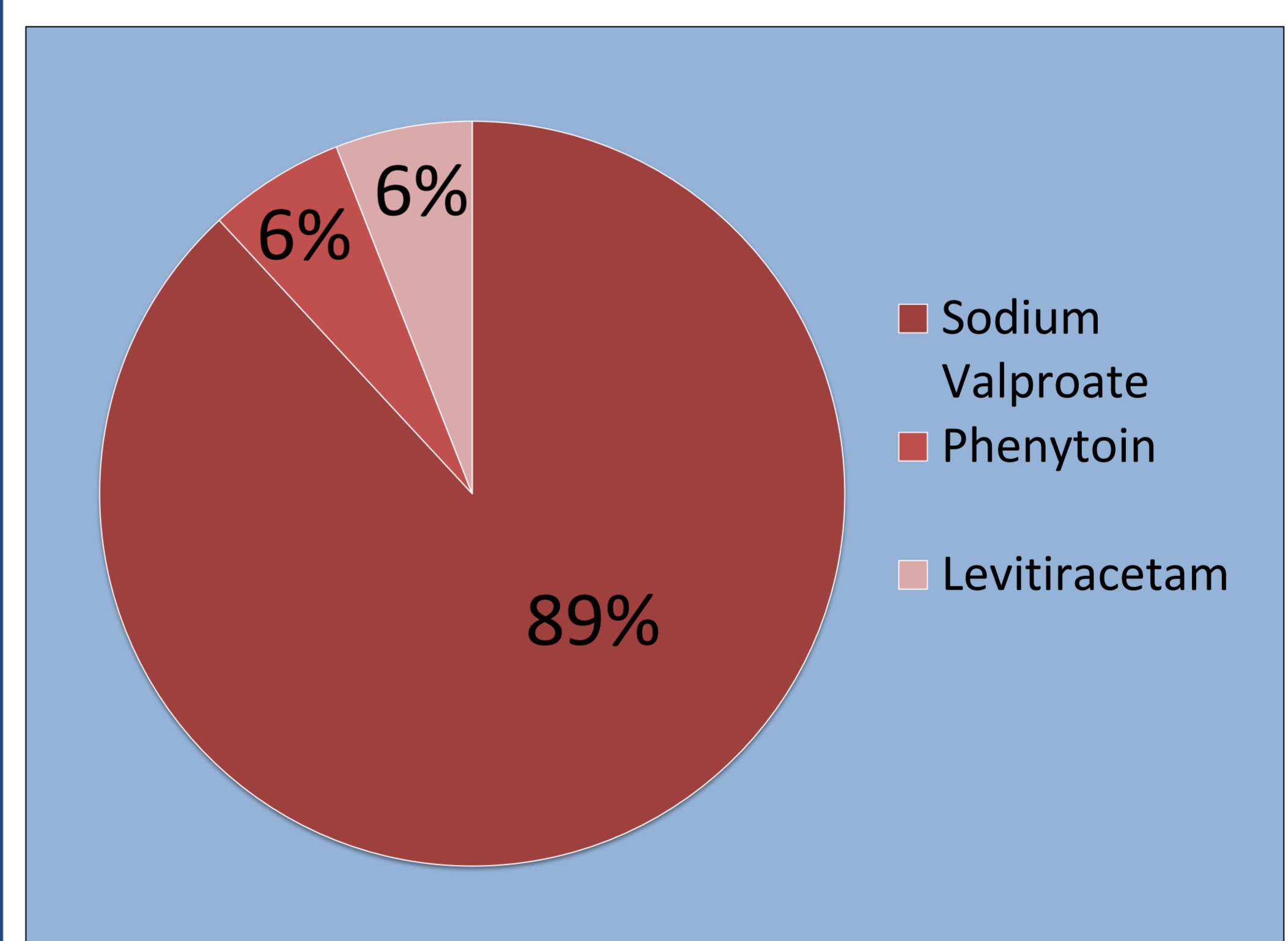


Figure 2:
Antiepileptic Therapy Prescribed

Conclusions

- 100% compliance with national guidelines in prescribing secondary seizure prophylaxis for CT cases.
- Discordant with national guidance primary prophylaxis was provided in a proportion of cases. National guidelines do not consider other relevant factors such as size of CT lesions and/or mass effect which may account for this in part.
- Disparity was also noted in duration of antiepileptic provision.
- More specific recommendations regarding drug choice and duration of use would be a useful adjunct to current guidelines.

References

1. http://www.bhiva.org/documents/Guidelines/OI/hiv_v12_is2_iss2Press_Text.pdf