Highlight in Epilepsy 2011

Pharmacotherapy

- New onset epilepsy
  - Conventional AED
  - New AED
- Refractory epilepsy
  - New AED
- Status epilepticus
  - Conventional AED
  - New AED
  - Surgery
  - Stimulation

Stimulation


Status epilepticus


Newly diagnosed epilepsy (> 16 yrs.) with seizure > 2 in 12 months

Primary endpoint: proportion of patients who remained seizure-free for > 6 months

Secondary endpoints:
- time to first seizure after dose-escalation phase
- number of seizures during the dose-escalation monthly seizure frequency
- HAD/MOS-Sleep (Medical Outcome Sleep Study Scale)
- Adverse event: 314/330 in pregabalin; 308/330 in lamotrigine

Stimulation
- Epileptic surgery
- Pharmacotherapy


Status epilepticus


- Children with BW >13 kg and adult
- Convulsive seizure >5 min.
- Drug Kit
  - BW >40 kg: IM midazolam 10 mg or IV lorazepam 4 mg
  - BW 13-40 kg: IM midazolam 2 mg or IV lorazepam 2 mg

Primary outcomes:
- termination of seizure before arrival in the ER
- time from initiation of active drug administration to termination of convulsions
- the frequency and duration of hospitalization and of admission to the ICU
- the frequency of acute ET and acute seizure recurrence

Primary outcome: p < 0.001 for noninferiority; p < 0.001 for superiority
Secondary outcome: no different in frequency of ET intubation, recurrent seizure, safety outcome, lengths of stay. Proportion of subjects admitted was significantly lower in the IM group than in IV group. Median time to administration of active treatment was significantly shorter by IV than after IM.

Status epilepticus

Prevention


Long term outcome and complication from AED


Guideline and Consensus

Patients receiving phenytoin may require a lopinavir/ritonavir dosage increase of about 50% to maintain unchanged serum concentrations (Level C).

Patients receiving valproic acid may require a zidovudine dosage reduction to maintain unchanged serum zidovudine concentrations (Level C).

Coadministration of valproic acid and efavirenz may not require efavirenz dosage adjustment (Level C).

Patients receiving ritonavir/atazanavir may require a lamotrigine dosage increase of about 50% to maintain unchanged lamotrigine serum concentrations (Level C).

Coadministration of raltegravir or atazanavir and lamotrigine may not require lamotrigine dosage adjustment (Level C).

Coadministration of raltegravir and midazolam may not require midazolam dosage adjustment (Level C).

Patients may be counseled that it is unclear whether dosage adjustment is necessary when other AEDs and ARVs are combined (Level U).

It may be important to avoid EIAEDs in people on ARV regimens that include PIs or NNRTIs, as pharmacokinetic interactions may result in virologic failure, which has clinical implications for disease progression and development of ARV resistance. If such regimens are required for seizure control, patients may be monitored through pharmacokinetic assessments to ensure efficacy of the ARV regimen (Level C).
Montreal Cognitive Assessment in cryptogenic epilepsy patients with normal Mini-Mental State Examination scores

Keywords: Montreal Cognitive Assessment, cryptogenic epilepsy, Mini-Mental State Examination