

Rational Combination of Antiepileptic Drugs : How?

허 경
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가

Rational Basis for Polypharmacy : Clinical evidence

Before Polytherapy

- 1)
- 2)
- 3)
- 4)
- 5)

drop attack

가

가 82 40%가 11% 가

controlled 7% 20 44% 50% 가

가 .²⁾ 가 .³⁾ 가 가 , Hakka -

rainen 4) 100 phenytoin carbamazepine

50 33 phenytoin carbamazepine

5 (15%) Tanganell Regesta⁵⁾ carbamaze - pine vigabatrin 14 5 (36%) 가

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가 Table 1 가

Table 1. Choice of antiepileptic drugs for different seizure types

Type of seizure	Monotherapy, first choice	Monotherapy, second choice	Monotherapy, third choice or add-on drug(alphabetic order)
Partial seizure (2nd GTC)	CBZ	VPA, PHT	CLOBA, GBP, LTG, OCBZ, PB, PRM, TPM, VGB, ZNS
Generalized seizure Tonic-clonic	VPA	CBZ	CLOBA, GBP, LTG, OCBZ, PB, PRM, PHT, TPM, ZNS
Absence	VPA	ESM	CLOBA, CZP, LTG, TPM, ZNS
Myoclonic	VPA	CZP	CLOBA, LTG, PB, PIR, TPM, ZNS

The drug in second choice can be used in first choice depending on circumstances.
 CBZ : carbamazepine, CLOBA : clobazam, CZP : clonazepam ES : ethosuximide, GBP : gabapentin, LTG : lamotrigine, OCBZ : oxcarbazepine, PB : phenobarbital, PHT : phenytoin, PIR : piracetam, PRM : primidone TPM : topiramate, VGB : vigabatrin, VPA : valproic acid, ZNS : zonisamide, 2nd GTC : secondarily generalized tonic-clonic

gabapentin confidence
 lamotrigine interval
 carbamazepine valproate,⁶⁾ valproate
 clonazepam,⁷⁾ lamotrigine vigabatrin,⁸⁾ lamotrigine
 valproate⁹⁾¹⁰⁾, valproate ethosuccimide¹¹⁾
 absence 가 가 가
 valproate lamotrigine lamotrigine,
 valproate, carbamazepine, phenytoin topiramate, zonisamide
 gabapentin vigabatrin
 lamotrigine⁹⁾ carbamazepine 가 . Vigabatrin infantile spasm
 (41%), phenytoin (38%) lamotrigine , lamotrigine to-
 valproate (64%) piramate¹⁴⁾¹⁵⁾ Lennox -
 50%), valproate Gastaut 가 .
 가 lamotrigine

**Rational Basis for Polypharmacy :
 Theoretical Considerations**

(mouse)
 controlled 가 가 가
 controlled
 14%
¹²⁾ 가
 51% 50% , 8%¹⁷⁾
 mate 가¹³⁾ topira -
 가
 metaanaly -
 sis²⁾ topiramate vigabatrin

다약물치료의 방법

1. 서로 다른 신경 생물학적 과정(작용 기전)에 작용하는 항경련제의 병용

absence channel 가 inhibition agabine 19) T - type calcium channel valproate 18) GABA - ergic inhibition vigabatrin ti -

가

sodium channel 가

GABA - ergic inhibition 가 sodium channel

2. 비슷한 부작용을 가지지 않거나 부작용이 적은 항경련제의 병용

Barbiturate benzodiazepine , topiramate zonisamide gabapentin, lamotrigine, vigabatrin

3. 약물 상호작용을 적게 일으키는 항경련제의 병용

(gabapentin, vigabatrin, lamotrigine, valproate)

4. 기존약물의 약물 동력학을 긍정적으로 변화시키는 약물의 병용

가 , valproate lamotrigine lamo -

trigine 가 lamotrigine ()

stiripentol carbamazepine carba - mazineepoxide/carbamazepine ratio .

5. 부작용을 감소시키거나 발작의 유발요인을 피하는데 도움을 주는 약물의 병용

valproate propranolol ,

(catamenial seizure) clobazam acetazolamide가

6. 환자적 측면

가) (가 phenobarbital, primidone, benzodiazepine 가 valproate

vigabatrin 가 valproate

(gabapentin, vigabatrin, topiramate 가)

7. 간질 형성 및 진행을 예방하는 약물의 병용

다약물 요법의 실제적 방법

1)

다약물치료의 방법

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