Chapter 4

NEW GENERATION ANTIEPILEPTIC DRUGS IN THE TREATMENT OF EPILEPSY

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İNTRODUCTION

Antiepileptic drugs are classified as classical (benzodiazepines, ethosuximide, carbamazepine, phenytoin, phenobarbital, valproic acid, primidone) and the new generation (zonisamide, vigabatrin, thiagabine, felbamate, lamotrigine, topiramate, oxcarbazepine, eslicarbazepine acetate, briveracetam, levetiracetam, retigabine, gabapentin, pregabalin, lacosamide, etc). New antiepileptic drugs (NAD) have been developed to alleviate the drug side effects of classical antiepileptic treatments. Although the new antiepileptic group has advantages in terms of side effect profile, drug interaction, and teratogenicity, they have not been demonstrated to be more effective than classical antiepileptics. The aim of this compilation is to guide the clinicians by explaining the effects and side effects of new antiepileptic drugs

NEW TREATMENTS IN EPILEPSY

Zonisamide (ZNS)

Zonisamide, 1,2-benzisoxazole-3-methanesulfonamide, a benzisoxazole derivative, is a new generation and broad-spec-

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cated as 600-1200 mg/day. Oral bioavailability is 60%. It reaches its maximum dose in the blood in approximately two hours after oral administration (33).

Side effects include weight gain, fatigue, dizziness, blurred vision, somnolence, urinary retention, confusion, QT prolongation, tremor, nausea, increased nail and skin pigmentation (7).

Conclusion

The rate of patients receiving new generation antiepileptic therapies has increased significantly in recent years. New generation antiepileptic drugs are better tolerated compared to classical antiepileptic therapies and therefore offer new alternatives for patients who are adversely affected by the side effects of classical antiepileptic therapies. As experiences grow, it is clear that these drugs may replace classic antiepileptics.

Keywords: Epilepsy, new generation antiepileptic drug

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