only if other drugs have failed. Its toxicity is severe and its effectiveness is not great. See the chapters on Antimalarial Agents, Anthelmintics, and Antineoplastic Agents for properties and other uses.

Usual Dosage.—Oral: Adults: 100 mg daily. *Children:* 1 to 2 mg per kilogram of body weight per day.

Preparations.—Atabrine Hydrochloride (Winthrop): Tablets 100 mg.

Diazepam [VALIUM]

This drug was introduced as an antianxiety agent, but like other benzodiazepine derivatives, it has anticonvulsant properties. Eventually, it probably will not prove the best anticonvulsant of this group, but it is the preferred one of these now marketed in this country. Conflicting reports of effectiveness in various epilepsies have appeared. The drug has shown much promise in petit mal, but perhaps of greatest importance is its value parenterally in terminating status epilepticus and its frequent effectiveness in minor motor epilepsy, which is so often refractory to the conventional anticonvulsants. Its greatest drawback in maintenance therapy is the eventual tolerance that develops to the therapeutic effect. However, this problem also occurs with other agents in minor motor epilepsy. The most common adverse effects with oral use are drowsiness, dizziness, fatigue, and ataxia, all dose related. Paradoxic excitement or stimulation sometimes occurs. Parenteral administration for status epilepticus requires observation for respiratory depression and hypotension, and the slight possibility of cardiac arrest must be borne in mind; however, from the limited information available, the overall safety of the drug appears to compare favorably with other agents used for this life-threatening emergency. See the monograph in the New Drugs section for other properties and uses.

Usual Dosage.—Oral: Adults: 4 to 40 mg daily in divided doses, beginning with a low dose and increasing it gradually. Consider starting with only 2 mg in elderly or debilitated patients. The effect of the drug is cumulative. *Children:* Somewhat reduced dosage, beginning with 2 to 4 mg daily in divided doses.

Intravenous: (Status epilepticus) *Adults:* 5 to 10 mg injected *slowly*. *Children:* 2 to 5 mg injected *slowly*. Intramuscular injection may be substituted if the convulsions make *slow* intravenous injection impossible. The drug should not be mixed physically with other agents or diluted with intravenous solutions.

Preparations.—Valium (Roche): Solution (injection) 5 mg/ml in 2 ml containers; tablets 2, 5, and 10 mg.

Corticotropin and Various Adrenal Corticosteroids

Of value in minor motor epilepsy. See the chapter on Adrenal Corticosteroids for detailed discussion of these agents.

Dosage varies with the agent used.

Mixtures

Several fixed combinations of anticonvulsants are marketed. They are listed below only to acknowledge their availability and not necessarily to encourage their use. The usefulness of such fixed combinations is limited since, in the management of epilepsy, the dosage of each drug used concomitantly should be established *individually*. After this has been done, if the doses present in an available mixture happen to correspond to the ratio and quantities required by the patient, the use of such a combination product would seem justified, for the convenience of the patient, unless a subsequent adjustment of dosage becomes necessary. However, some available combinations are unrealistic, since the usual dose of one ingredient carries with it only a trivial dose of the other. Some others contain irrational ingredients that are not effective therapeutic agents for epilepsy. Still others contain more than two ingredients and appear to be entirely too cumbersome for practical use in view of the importance of individualizing the dosage of every drug the patient receives.

ALEPSAL (Fougera): phenobarbital 97 mg, belladonna powder 20 mg, caffeine 26 mg/tablet

BARBA-NIACIN (Cole Pharmacal): phenobarbital 32 mg, niacin 16 mg/tablet

BARBA-NIACIN FORTE (Cole Pharmacal): phenobarbital 97 mg, niacin 48 mg/tablet

DILANTIN with PHENOBARBITAL (Parke, Davis): diphenylhydantoin sodium 100 mg, phenobarbital 16 or 32 mg/capsule

ELMALOIN with PHENOBARBITAL (Elder): diphenylhydantoin sodium 100 mg, phenobarbital 15 mg/capsule

HYDANTAL (Sandoz): mephenytoin 100 mg, phenobarbital 20 mg/tablet

MEBROIN (Winthrop): mephobarbital 90 mg, diphenylhydantoin 60 mg/tablet

NEO-SEDAPHEN (Smith, Miller & Patch): pentobarbital sodium 30 mg, phenobarbital sodium 10 mg, sodium bromide 300 mg, potassium bromide 200 mg, calcium bromide 100 mg/5 ml

PHELANTIN (Parke, Davis): diphenylhydantoin 100 mg, phenobarbital 30 mg, methamphetamine hydrochloride 2.5 mg/capsule

QUADRA-SED (Smith, Miller & Patch): pentobarbital sodium 15 mg, phenobarbital sodium 15 mg, butabarbital sodium 15 mg, secobarbital sodium 15 mg/5 ml

SEDALIXIR (National): pentobarbital sodium 8 mg, phenobarbital 16 mg/5 ml

SEDAPHEN (Smith, Miller & Patch): phenobarbital sodium 20 mg, sodium bromide 300 mg, potassium bromide 200 mg, calcium bromide 100 mg/5 ml

SEDOBARB #1 (Whittier): phenobarbital 16 mg, pentobarbital sodium 32 mg/tablet

SEDOBARB #2 (Whittier): phenobarbital 32 mg, pentobarbital sodium 65 mg/tablet