sedation. Amphetamines, which do not interfere with anticonvulsant action, sometimes useful for relieving drowsiness. Occasional skin eruptions; rare progression to exfoliative dermatitis. Abrupt termination in epilepsy may cause withdrawal convulsions, but true addiction and barbiturate inebriation unlikely in usual doses for epilepsy. Contraindicated in patients with porphyria.

Usual Dosage.—Oral: Adults: Usually 120 to 200 mg daily in divided doses. Range: 50 or 100 mg at bedtime to 300 mg in divided doses. *Children:* 1 to 6 mg per kilogram of body weight per day in divided doses.

Preparations.—Various, including: Elixir 20 mg/5 ml; tablets 16, 32, 50, 64, and 100 mg. Many manufacturers.

Phenobarbital Sodium

Used parenterally in status epilepticus, but may depress respiration. Parenteral diphenylhydantoin may be given concomitantly.

Usual Dosage.—(Status epilepticus) *Intramuscular, Slow Intravenous: Adults:* 200 to 320 mg. *Children:* 3 to 5 mg per kilogram of body weight represents a reasonable guide.

Preparations.—Various, including: Powder 120, 130, and 320 mg; solution 130 mg/ml in 1 ml containers; 160 mg/ml in 2 and 10 ml containers; tablets (hypodermic) 60 mg. Many manufacturers.

Mephobarbital [MEBARAL]

Metabolized to phenobarbital and has effects similar to phenobarbital, but larger doses are used.

Usual Dosage.—Oral: Adults: 200 mg at bedtime to 600 mg daily in divided doses. *Children:* Under 5 years, 16 to 32 mg three or four times daily; over 5 years, 32 to 64 mg three or four times daily.

Preparations.—Mebaral (Winthrop): Tablets 32, 50, 100, and 200 mg.

Metharbital [GEMONIL]

Similar to phenobarbital, but less potent on basis of weight. Dosage adjustment can compensate for this difference. Has same relation to barbital as mephobarbital has to phenobarbital.

Usual Dosage.—Oral: Adults: Initially, 100 mg at bedtime to 300 mg daily in divided doses. Increase to as much as 600 to 800 mg daily if required. *Children:* 5 to 15 mg per kilogram of body weight daily in divided doses.

Preparations.—Gemonil (Abbott): Tablets 100 mg.

Primidone [MYSOLINE]

Not really a barbiturate by traditional classification, but closely related chemically. However, larger doses are needed. Principal usefulness is as substitute for barbiturates in patients not responding adequately to regimen of barbiturate and hydantoin. No compelling reason why it may not be used as initial anticonvulsant in major motor and psychomotor epilepsy, but it is more commonly reserved for refractory cases because it often causes marked sedation. Sedation often diminishes with continued administration. Dosage build-up should be gradual to avoid incapacitating drowsiness. Ataxia and various relatively minor reactions resemble those of barbiturates. Skin eruptions occasionally occur. Megaloblastic anemia may occur; responds to folic acid.

Usual Dosage.—Oral: Adults: 250 mg to 2 gm daily in divided doses. *Children under 8 years:* One-half adult dosage.

Preparations.—Mysoline (Ayerst): Suspension 250 mg/5 ml; tablets 50 and 250 mg.

Hydantoins

Diphenylhydantoin Sodium [DILANTIN]

Drug of choice among the hydantoins. Often used in conjunction with phenobarbital. Used in major motor and psychomotor epilepsy. Has little or no sedative activity in usual doses. Ataxia occurs with larger dosages; if persistent, it indicates overdosage, and the dose must be reduced. Ocular signs and symptoms such as nystagmus and diplopia may also necessitate reduction of dosage. Skin eruptions rather frequent; only rarely serious. Gingival hyperplasia common, and often is severe in children; scrupulous oral hygiene helps prevent it. Hirsutism and excessive activity are less common but do occur, especially in the young. Rare but serious idiosyncratic reactions include hepatitis, marrow depression, megaloblastic anemia, lupus erythematosus, Stevens-Johnson syndrome, and lymphadenopathy resembling malignant lymphoma (see general statement).

Useful parenterally for control of status epilepticus. Unlike barbiturates, seldom depresses respiration. However, onset of action is slower than barbiturates. Also, if intravenous administration is too rapid, dangerous hypotension may occur.

Usual Dosage.—Oral: Adults: Initially, 100 mg three times daily; most common maintenance dose is 300 to 400 mg daily but may reach 600 mg. *Children:* 3 to 8 mg per kilogram of body weight daily in divided doses.

Intramuscular, Intravenous: (Status epilepticus) *Adults:* 150 to 250 mg. Inject intravenously no faster than 50 mg per minute. *Children:* Reduce dosage according to weight or body surface area.

Preparations.—Dilantin (Parke, Davis): *Oral:* Capsules 30 and 100 mg. *Injection:* Powder 50 mg/ml when properly diluted with special solvent provided in 100 and 250 mg vials.

Diphenylhydantoin [DILANTIN]

See Diphenylhydantoin Sodium.

Preparations.—Dilantin (Parke, Davis): *Oral:* Capsules (delayed action) 100 mg; capsules (Dilantin in oil) 100 mg; tablets (pediatric) 50 mg; suspension 100 mg/4 ml.

Ethotoin [PEGANONE]

Moderately effective in grand mal and slightly so in psychomotor epilepsy, but usually unsatisfactory if used alone. Toxicity resembles that of diphenylhydantoin but incidence of at least some