also metabolizes serotonin and dopamine. The enzyme is inhibited by iproniazid. It is widely distributed in animal tissue such as liver, kidney, intestine, brain, blood vessels, placenta and lungs where it is found largely (or exclusively) in mitochondria. Because it is located in tissues where true cholinesterase levels are low, it has been suggested that just as cholinesterase is responsible for destroying acetylcholine so monoamine oxidase may inactivate a neurohormonal transmitter, such as noradrenaline or dopamine. Serotonin and monoamine oxidase show a parallel distribution in dog and cat brain, the levels being highest in the hypothalamus. Like acetylcholine, serotonin is apparently present in nervous tissue in a precursor state and seems to be active only when in a free form. It may have a role in central neurotransmission, being liberated momentarily in a free and active form and then rapidly destroyed. That monoamine oxidase may be responsible for the destruction of biogenic amines *in vivo* has been poorly supported by experimental evidence, but it probably plays a small but definite part in the *in vivo* metabolism of histamine, adrenaline and noradrenaline. (*Davison, A. N.: Physiological Role of Monoamine Oxidase, Physiol. Rev. 38: 729 (Oct.) 1958.*)

NEOSTIGMINE TOXICITY When the patient suffering from myasthenia gravis passes into a state of respiratory crisis, as the maintenance dose of neostigmine is increased to meet the rising demand, its input may rapidly overtake its elimination and a cumulative effect be produced. Neostigmine in high concentration may act as a neuromuscular blocker in its own right and produce respiratory failure from muscle paralysis. Controlled intermittent positive pressure respiration must be continued for some days while the drug is eliminated and gradual weaning practised. (*Shackleton, P.: The Management of the Apnoeic Patient, Ann. Roy. Coll. Surgeons (England) 23: 187 (Sept.) 1958.*)

PHENOTHIAZINE Preanesthesic medication with Pacatal alone or in combination with meperidine or pentobarbital provided increased sedative and analgesic effects of the latter drugs, antiemetic benefits (reduction of vomiting incidence from 21 per cent to 7 per cent) and drying of the respiratory tract. No marked respiratory or circulatory depression occurred preoperatively, during operation, or postoperatively. This drug is preferred to other phenothiazine derivatives for use in anesthesia. (*Corssen, G., and Allen, C. R.: Clinical Evaluation of 10(N-Methyl-piperidyl-(3)-Methyl) Phenothiazine (Pacatal) for Use in Anesthesia, South. Med. J. 51: 689 (June) 1958.*)

MEGIMIDE Megimide and Metrazole give essentially similar effects in producing electroencephalographic effects or clinical seizures in epileptics. There appeared to be less undesirable side effects from Megimide but convulsions occurred. (*Rodin, E. A., and others: Megimide and Metrazol, Electroencephalography and Clinical Neurophysiology, 10: 719 (Nov.) 1958.*)

OXYGEN Rats were anesthetized with chloralose or with a barbiturate given intraperitoneally. After the necessary cannulations or operative procedures they were placed in a steel chamber under a pressure of six atmospheres of oxygen. There was no rise in carbon dioxide tension in the arterial blood before the onset of cardiac or respiratory failures. After respiratory failure carbon dioxide tensions attained very high levels. (*Taylor, D. W.: Changes in Cardiac and Respiratory Rates, and in Carbon Dioxide Pressure and pH of Arterial Blood, in Anaesthetized Rats Exposed to Oxygen under High Pressure, J. Physiol. 143: 149 (Aug. 29) 1958.*)

LIVER FUNCTION In anesthetized dogs subjected to elevated carbon dioxide tension, arterial blood levels of carbon dioxide ranged from 58 to 86 volumes per cent. Liver function as determined by removal of Bromsulfalein was consistently impaired. Blood pressure determinations indicated that circulation was not altered appreciably during the test period. (*Holmes, E. L., and Barnhart, M. I.: Effect of Increased Carbon Dioxide Retention on Liver Function in the Dog, J. Appl. Physiol. 13: 184 (Sept.) 1958.*)

RESERPINE Experiments were undertaken to determine the effect of reserpine-induced

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