"The respiratory effects of ephedrine are twofold. It causes dilatation of the bronchioles by its action on the smooth muscle and it stimulates the respiratory center directly. Other central effects are stimulation of the central vasomotor centers, cortical and subcortical centers. The latter effect accounts for the insomnia, nervousness, tremor and motor restlessness occurring from overdoses of ephedrine. Spinal reflexes are increased. Other actions on smooth muscle are mydriasis caused by the action of ephedrine on the iris, relaxation of the musculature of the gastrointestinal tract and inhibition of peristalsis. The tone of the vesical sphincter is definitely increased and it may go into spasm. The isolated uterus usually is stimulated by ephedrine. The spleen contracts. The metabolic effects of ephedrine are similar to those described for epinephrine, but to a lesser degree. Graham and Willinsky used ephedrine to prevent and treat hypotension during spinal anesthesia in 1926.

"Neosynephrin is a sympathomimetic amine with one hydroxy group at the meta position on the benzene ring. The pharmacologic actions of neosynephrin are similar to those of epinephrine. Neosynephrin is much more stable and produces more lasting responses than does epinephrine. Nothing is known about the fate and excretion of this compound. Dodd and Prescott, in 1943, reported that methedrine was an effective vasopressor agent. Oliver and Schafer, in 1895, showed that an extract from the posterior pituitary gland exerted a vasopressor effect in animals and that it lasted longer than the effect produced by epinephrine. Melville and Stehle, in 1931, reported the effects of combining pitressin and ephedrine. They demonstrated a symbiotic effect on the cardiovascular system of dogs. Roman-Vega and Adriani and Heringman and Adriani have studied the vasopressor activity of oenethyl . . . found it to be a satisfactory vasopressor for the control of hypotension resulting from spinal anesthesia. . . . Vasopressor drugs have a definite but limited value in clinical anesthesia. They are most useful in combating the hypotension associated with spinal anesthesia." 3 references.

J. C. M. C.


"A new synthetic analgesic, originally prepared by German chemists and known as drug 10820, was made available to this country following World War II. The original report was published by the U. S. Department of Commerce. The Council on Pharmacy and Chemistry of the American Medical Association has given this compound the nonproprietary name of methadon. . . . In April 1946 clinical trials of the drug were instituted at the University of Minnesota Hospitals. Up to the present time methadon has been given to a total of 400 patients for relief of all types of pain. . . . The drug has characteristics of both morphine and meperidine. . . . Oral use of the elixir is almost as effective as the hypodermic injection. . . . Ten mg. of methadon is as effective in relieving pain as 15 mg. of morphine or 150 mg. of meperidine. . . . Adequate or complete relief of pain occurred in 81 per cent of 400 patients. . . . Less sedation and euphoria occur with methadon than with morphine. . . . Side effects occurred in 13 per cent of patients. . . . Tolerance to the drug may develop. . . . Addiction has not been definitely established." 11 references.

J. C. M. C.