The most definite subjective effects of both morphine phosphate (10 mg./70 kg.), and heroin hydrochloride (4 mg./70 kg.), were mental clouding, mental and physical "deactivation" and "somatic" effects such as dizziness, itching, sweating, numbness, nausea and visual difficulties. Although most subjects reported unpleasant emotional effects, two of the 24 men reported pleasant ones. The effects of the two opiates were similar; the main differences were that the heroin effects were stronger and reached peak degrees earlier than the morphine effects. Both opiates produced unpleasant physical and emotional side effects, but the heroin effects were even more unpleasant than those of morphine. (*Smith, G. M., and Beecher, H. K.: Subjective Effects of Heroin and Morphine in Normal Subjects, J. Pharmacol. Exp. Ther. 136: 47 (Apr.) 1962.*) Comparison of morphine (10 mg.), heroin (4 mg.) and placebo showed that heroin and morphine can produce statistically significant impairment of certain aspects of mental performance, and the overall effect of each drug is definitely one of mental impairment. The impairment is primarily one of speed rather than accuracy. The impairment produced by 4 mg. of heroin appears earlier and is somewhat greater than that produced by 10 mg. of morphine. Significant mental impairment can be demonstrated as early as 40 minutes and as late as five hours and 40 minutes after administration of 10 mg. of morphine. (*Smith, G. M., Semke, C. W., and Beecher, H. K.: Objective Evidence of Mental Effects of Heroin, Morphine and Placebo in Normal Subjects, J. Pharmacol. Exp. Ther. 136: 53 (Apr.) 1962.*)

OXYMORPHONE Effects were studied of oxymorphone administered alone or preceded or followed by levallorphan upon the respiration of 30 patients. Oxymorphone produces marked respiratory depression which can be counteracted by levallorphan, no significant circulatory effects except bradycardia, and the foregoing effects only when administered intravenously. Oxymorphone is about 33 times more potent than meperidine as a supplementation of nitrous oxide-thiopental anesthesia, which is believed to be due to longer duration of action. (*Foldes, F. F., and others: Respiratory Effects of Oxymorphone Administered Alone or in Combination with Levallorphan, Amer. J. Med. Sci. 243: 480 (Apr.) 1962.*)

RESERPINE Membrane potential changes were recorded from single smooth muscle cells of the guinea pig vas deferens. Both spontaneous potentials and junction potentials arising from stimulation of the sympathetic nerves were observed. Recording following the section of the hypogastric nerve resulted in a reduced frequency but not amplitude of the discharge of spontaneous potentials. Junction potentials were smaller and a greater frequency of nerve stimulation was required for spike potentials to be evoked and a contraction to occur. Recordings were then made from muscle cells from chronically reserpinized guinea pigs with depleted local stores of catecholamines. Both frequency and amplitude of spontaneous potential were reduced. Junction potentials were smaller and facilitation slower so that many stimulating pulses were required before spike was evoked and a contraction occurred. These results are taken to support the view that the relationship between junction potentials and spontaneous potentials in sympathetically inervated smooth muscle cells are essentially the same as that found at other neuroeffector junctions and that norepinephrine is the transmitter released both spontaneously from local stores and in response to nerve stimulation. (*Burnstock, G., and Holman, M. E.: Effect of Denervation and of Reserpine Treatment on the Transmission at Sympathetic Nerve Endings, J. Physiol. 160: 461 (Mar.) 1962.*)

METARAMINOL In rats, subcutaneous administration of metaraminol at dosages between 2 mg. and 6 mg. was followed by the development of renal necrosis and vascular lesions. These lesions predominantly affected arteries, including renal arteries, which showed focal distention and muscle necrosis. These pathologic changes were prevented by simultaneous treatment with hydrolazine at dosages that do not significantly inhibit the pressor effect of metaraminol. (*Masson, G. M. C., and Kawakita, S.: Experimental Production of Renal and Vascular Lesions with Metaraminol, Cleveland Clin. Quart. 29: 38 (Jan.) 1962.*)