[From The Medical Letter, May 26, 1972, Vol. 14, No. 11, pages 37–38]

DARVON AND DARVON–N

Propoxyphene, a mild analgesic, is now available as one of two salts in nine different formulations. The napsylate (Darvon–N—Lilly) was recently introduced and is more stable than the hydrochloride (Darvon—Lilly); it is available as a liquid or in tablets. Because of differences in molecular weight, a dose of 100 mg of the napsylate is needed to provide an amount of propoxyphene equivalent to that in 65 mg of the hydrochloride. Both preparations cost several times as much as aspirin. Since the pharmacologic effects are similar, the following discussion applies to both salts.

Efficacy.—Proxyphene was the most frequently prescribed drug in the Los Angeles County-University of Southern California Medical Center (R.F. Maronde et al., Med. Care, 9:383, 1971); Darvon preparations probably have been prescribed more often than any other drug for the last five years in the United States. Nevertheless, reservations about the efficacy of propoxyphene continue to be expressed. Several reviews have questioned its place in therapeutics. Two of these, by W. T. Beaver (Am. J. Med. Sci., 251:576, 1966) and the Drug Efficacy Study of the National Academy of Sciences-National Research Council, were discussed in the last Medical Letter review of propoxyphene (Vol. 12, p. 5, 1970). Since then, R. R. Miller et al. (JAMA, 213:996, 1970) have reviewed all available double-blind studies of propoxyphene and concluded that it ". . . is no more effective than aspirin or codeine and may even be inferior to these analgesics." It is generally agreed that a 32-mg. dose provides little more than a placebo effect in most patients. In a recently published double-blind study of single doses of propoxyphene, aspirin, and other oral analgesics in patients with cancer, C. G. Moertel et al. (N. Engl. J. Med., 286:813, April 13, 1972) were unable to demonstrate that even 65 mg of propoxyphene was significantly superior to placebo. In this study, aspirin was the most effective analgesic tested.

Adverse effects.—One Medical Letter consultant reports that the adverse reaction rate for propoxyphene administered to over 2,000 hospitalized medical patients was about 0.5 per cent and the reactions were mostly minor (nausea, vomiting, drowsiness, rash, vertigo). One case of hallucinations and disorientation was observed. The drug also may cause encephalopathy in patients with diminished liver function. The frequency of adverse effects varies with dosage; there is no evidence that truly analgesic doses of propoxyphene are less harmful than equianalgesic doses of other drugs.

Overdosage.—An increasing number of cases of ingestion of lethal and near-lethal doses of propoxyphene is being reported. In general, the symptoms of overdosage are similar to those seen with narcotic drugs. Various degrees of respiratory, central-nervous-system, and circulatory depression are usually present. Convulsions (seldom seen with narcotics other than meperidine) and coma have been observed. Analeptic agents are dangerous in patients with propoxyphene poisoning because they increase the risk of convulsions. Death usually results from hypoxia, with pulmonary edema and vascular congestion. Propoxyphene toxicity can be treated with narcotic antagonists such as naloxone (The Medical Letter, Vol. 14, p. 2, Panuary 7, 1972).

Dependence.—Dependence on propoxyphene is well documented; it is usually psychological and substantially less intense than that seen with morphine or heroin. Physical dependence has been observed with high doses. Some Medical Letter consultants suggest that dependence would be more frequent if this drug were given in doses high enough to provide effective analgesia.

Abuse.—Orally-administered propoxyphene is reported to be widely abused by adolescents. Since propoxyphene preparations have been reformulated to eliminate the pellet of propoxyphene in capsules, abuse by intravenous injection no longer appears to be a problem.

Aspirin vs. Darvon.—Propoxyphene has been used as an alternative to aspirin. While adverse reactions to aspirin are observed in about five percent of hospitalized patients, only a small fraction are serious (e.g., severe gastrointestinal bleeding, interference with normal clotting processes). Inasmuch as propoxyphene is largely prescribed as Darvon Compound–65, which includes aspirin, the potential toxicity of aspirin is not avoided. Since the analgesic efficacy of aspirin has been established beyond doubt and since it is inexpensive, aspirin is recommended as the drug of first choice in treating mild to moderate pain except when it is contraindicated in such conditions as peptic ulcer. The cost to the pharma-