even less of a problem than with either propoxyphene or codeine. However, pentazocine seems to produce a somewhat higher incidence of unpleasant adverse effects at usual therapeutic doses than equi-effective doses of codeine, and pentazocine occasionally produces frank psychotomimetic reactions which may be very disturbing to the patient. While pentazocine has less abuse liability than regular narcotics, deliberate self-administration of the drug for its mood effects undoubtedly occurs, and the Food and Drug Administration's Controlled Substance Advisory Committee has recently recommended scheduling pentazocine in Schedule IV.

The purpose of the above comments on alternative mild analgesics was not to denigrate the value of these drugs for the patient with pain, but rather to put the adverse effect liability of propoxyphene in some reasonable perspective.

ADVERSE EFFECTS OF SCHEDULE II NARCOTICS

The only currently available alternative oral analgesics to the mild analgesics discussed above are the Schedule II narcotics. These include such drugs as morphine, hydromorphone (Dilaudid®), hydrocodone (Diocodid®); oxycodone (constituent of Percodan®), levophanol (Levodromoran®), anileridine, meperidine (Demoral®) and methadone. While in substantial oral does, these drugs are all capable of producing significantly greater pain relief than the mild analgesics noted above [Moertel, 1976], they are all quite capable of producing lethal narcotic overdose, and all have a clearly higher dependence and abuse liability than propoxyphene, codeine or pentazocine. In addition, doses of these Schedule II narcotics which produce pain relief greater than the mild analgesics are also associated with a significantly higher incidence of disturbing gastrointestinal and central nervous system adverse effects. Therefore, their use would only seem to be indicated for those patients for whom conventional mild analgesics or combinations prove ineffective or not tolerated.

WHY DO DOCTORS PRESCRIBE PROPOXYPHENE?

I have listed below, not necessarily in order of importance, a number of factors which seem to me responsible for the popularity of propoxyphene products.

1. It has been claimed that the popularity of propoxyphene in the face of its less than impressive performance in controlled clinical trials is primarily due to the extensive and effective promotional efforts for Darvon® by Eli Lilly & Company. Indeed, the best ball point pen that I ever owned was given to me by a Lilly detail man and is emblazoned with the words, "Darvocet N–100". However, many drug companies utilize the services of inventive advertising agencies and have dedicated swarms of detail men at their disposal, and yet, much to their chagrin, these companies are unable to stir up the sustained high demand for their analgesic product which has been accorded the Darvon® family. I think one must look further than promotional efforts alone to explain the success of propoxyphene over the past 20 years.

2. Physicians seem to need a mild analgesic which is as effective as aspirin, acetaminophen or APC which is not available over-the-counter. Many patients feel that these antipyretic analgesics cannot be terribly effective because they are available over-the-counter and have a psychological need to receive an analgesic which is only available on prescription. Physicians recognize and respond to this need. Propoxyphene products are available in a variety of impressive colors, shapes and sizes and are only available through prescription. Furthermore, as noted above over 80% of prescriptions for propoxyphene products are for combinations containing aspirin, acetaminophen or APC and these combinations are at the very least as effective as the antipyretic-analgesics which they contain. This must be coupled with the fact at recommended doses propoxyphene produces an extremely low incidence of any sort of adverse effects and a virtually zero incidence of serious adverse effects.

One must also consider the alternatives which the physician has available. When Darvon® came on the market in 1957, the significant mild analgesics available as single entities and in combination included aspirin and other salicylates, acetaminophen, phenacetin and codeine. Today, over 20 years later, the only addition to this group has been oral pentazocine (Talwin®). When the patient with persistent pain tells his doctor that this current medication is either ineffective or poorly tolerated (a repetitive occurrence for many patients with chronic pain problems), the physician needs alternatives available. Useful alternative medications have simply not been forthcoming.