

USE OF d-AMPHETAMINE

trolled study has demonstrated a long-term beneficial effect on body weight of obese adolescents. Reports in the literature concerning adults who abuse drugs frequently indicate that their first exposure to stimulant drugs was through a physician prescribing amphetamines for weight reduction. Moreover, a fair percentage of adolescents are over-weight and this age group is particularly vulnerable to becoming abusers, in contrast to the young child who receives medication for hyperkinesis.

The availability and use of amphetamines is commonplace among teenagers. In a study¹⁰ of 1,300 students in five San Francisco area colleges, only 8% reported having any difficulty in obtaining a supply of amphetamines. In the 1971 *Playboy* survey of 3,000 college students, use of amphetamines while in college was registered at 30% and was exceeded only by use of alcohol and marijuana. Over 60% of those who used amphetamines denied chronic use; most used them when "cramming" for examinations, attempting to lose weight, or hoping to excel in athletic competition. These patterns of abuse probably should be considered as distinct from the abuse by intravenous administration of high doses in a chronic manner. A physician prescribing the drug is frequently the initial source of supply; its use can then be continued by its easy availability from peers. The abuse of stimulants is frequently concurrent with sequential abuse of depressive drugs, particularly barbiturates and alcohol. Thus, the signs and symptoms of abuse may range from undetectable to those of paranoid delusions and wildly destructive behavior associated with heavy use of intravenous methamphetamine in so-called runs, i.e., the administration every few hours for as long as several days.

The misuse of these agents frequently can be traced to mistaken ideas about their usefulness as therapeutic agents. Pediatricians have had unduly optimistic expectations of therapeutic responses for the child with poor school performance, the overweight child, or the teen-ager with mild

depression. School and team physicians have allowed or overlooked the use of amphetamines and similar agents in athletic contests. Pediatricians are also under pressure from educators and parents who are concerned regarding children who act out in school or are difficult to manage.

Agents such as methylphenidate (Ritalin), phenmetrazine (Preludin), methamphetamine (Desoxyn), and chlorphen-termine (Pre-Sate) have properties similar to d-amphetamine. When tested in a randomized, double-blind fashion under carefully controlled conditions, experienced abusers did not distinguish among intravenous amphetamine, methamphetamine, phenmetrazine, and methylphenidate.¹¹

An estimated 8 billion amphetamine-containing tablets are manufactured annually in the United States; this is enough to give every man, woman, and child in the nation 35 substantial doses. This indicates a widespread misuse of an agent having extremely limited therapeutic value. Pediatricians must reflect on their role in introducing patients to these agents; they must not unwittingly contribute to the current problem of overuse, misuse, and abuse. Moreover, physicians must be aware of the widespread use of these agents by some of their patients so they can accurately diagnose illnesses ranging from mild problems of insomnia, nervousness, and depression¹² to such severe conditions as hepatitis, septicemia, and psychotic reactions which may result from intravenous abuse.

The Committee on Drugs recommends that:

1. the use of d-amphetamine and similar agents be limited to children with a clearly defined hyperkinetic syndrome or narcolepsy;
2. d-amphetamine and related agents should not be used in the treatment of obesity;
3. pediatricians become familiar with the wide variety of signs and symptoms that may result from use and abuse of amphetamine-like drugs;