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USE OF d-AMPHETAMINE AND RELATED CENTRAL NERVOUS SYSTEM STIMULANTS IN CHILDREN

The abuse of amphetamines has become a problem of international significance. Japan was the first country to recognize this problem, and by 1954 there were an estimated 500,000 to 600,000 abusers in Japan. More than ten years ago Japan banned the use of amphetamines. The United Kingdom restricted distribution of amphetamines to hospital pharmacies in 1968. Sweden categorized amphetamine as a narcotic in 1944 because of abuse; and in 1965 phenmetrazine (Preludin) and in 1968 methylphenidate (Ritalin) were removed from the market. Patients now requiring amphetamines are registered with the government. Sweden has about 10,000 drug addicts (almost all between 15 and 30 years of age) using central stimulants intravenously; this is about the same percentage of their population as the estimated percentage of heroin addicts in New York City.[1] In contrast, the number of heroin and opiate addicts in Sweden is estimated to be less than 500.

In 1970, the Food and Drug Administration (FDA) responded to the problem of amphetamine abuse in the United States by limiting the package insert labeling for amphetamines to three indications: narcolepsy, hyperkinesis in children, and the short-term treatment of obesity. Currently, the latter indication is being reviewed and may no longer be valid.

Among the related agents there is some specificity in labeling, e.g., methylphenidate is approved for use in adults with mild depression, narcolepsy at any age, and children with minimal brain dysfunction but not obesity; phenmetrazine for use only in obesity, etc. However, in the broad view there is a similarity in the pharmacologic properties, side effects, and abuse liability of dextro-amphetamine, methamphetamine, methylphenidate, and phenmetrazine. Since the latter two drugs are available only through a single company as a trademarked product, control has been strict and large scale diversion to illicit channels has not been a problem in the United States.

The FDA also has limited the amount of amphetamine which can be manufactured. In 1972 procurement of methylphenidate was cut in half (from 2,854 kg produced in 1971), and that of phenmetrazine was reduced from 4,638 kg to 2,672 kg.

In addition, amphetamine, phenmetrazine, methamphetamine, and methylphenidate were elevated to Schedule II substances, the same category as opium, codeine, and morphine. Schedule II drugs are those considered to have a high potential for abuse, and such abuse may lead to severe psychologic or physical dependence. The Health Protection Branch of the Department of National Health and Welfare of Canada, with the endorsement of the Canadian Medical Association and l'Association des médeciñs de langue française du Canada, has moved to prohibit the use of amphetamines and related compounds for weight reduction purposes as of September 1, 1972.

The actions by governmental agencies prompted this review of the medical indications for the use of amphetamine in the pediatric age group. The Committee will also consider ways in which these agents become diverted to illegal usage.

At present there are only two valid indications for the use of amphetamines in childhood: (1) the hyperkinetic syndrome,

The statements presented herein do not preclude alternatives which may be more appropriate, taking into account local situations and all other relevant facts.

Executive Board, AAP