GASOLINE ADDICTION IN CHILDREN

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INTRODUCTION

Symptoms of cerebral intoxication caused by gasoline fumes are a frequently discussed subject from the point of accidental inhalation in industry. The writers believe that intentional sniffing, as a manifestation of behavioral problems in children, is a neglected subject. In surveying the American literature, it was possible to find only a few sporadic case reports of intentional inhalation in the past 20 years. Furthermore, there is no discussion offered in the standard textbooks of child psychiatry. This usually evokes great surprise from clinicians who refer to verbal reports. Three cases will be presented here of adolescents who appeared on the child psychiatry service of the University of Minnesota Hospitals* within a two-month period with histories of so-called addiction to gasoline fumes. All three patients received individual psychotherapy, besides being exposed to intensive milieu therapy, which included daily school attendance and involvement in an occupational therapy program.

CASE REPORTS

Case 1

This patient was a 15-year old boy, admitted to the child psychiatry service on referral from his local physician and the local welfare board. He had been in foster homes for four years, with a previous long-standing history of family maladjustment and emotional instability. In the foster homes, he had had difficulty adjusting and was also having school problems, academically and behavior-wise. Periods of depression with low self-esteem were interspersed with episodes of aggressive behavior during which he would provocatively engage in fights with his peers.

While in the hospital he appeared to be an unhappy boy who stated he had repeatedly run away from foster homes without really knowing why. He had resorted to the inhalation of gasoline fumes as a further means of escape. During these inhalation episodes, he said, he felt light-headed and had once had an “accidental period of unconsciousness.” He had inhaled fumes two to five times a week over a six-month period, usually in the morning when warming up the family tractor at his foster home. Accompanying the gas inhalation, were visual hallucinations which he reported as “seeing jelly-like figures that were formless and flabby-shaped.”

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These figures would frequently scare him, and he would yell at them, telling them to let him alone. At other times, an erotic component was more prominent than hallucinations. There would be transient erections at the peak of his “drifting feeling.”

The boy’s physical and neurological examinations showed no pathology except a tremor on admission. An EEG was normal, as was the laboratory work. Psychological testing showed a WISC (Wechsler Intelligence Scale for Children) full-scale IQ of 96, but there was a 50-point spread between the performance scale IQ of 122 and the verbal scale IQ of 72; further testing did not indicate organic brain damage. Personality tests (MMPI, Rorschach, and TAT) were not interpreted as psychotic. During his subsequent two-month stay in the hospital and a three-month follow-up, there had been no recurrence of his hallucinatory symptoms nor had gasoline inhalation been resumed.

Case 2

The patient in Case 2 was a 13-year-old delinquent boy on probation, referred by the Juvenile Court Service. He had a history of repetitive stealing and other acting-out in the community, along with enuresis. The family had been disrupted eight years previously when the mother obtained a divorce because of the father’s repeated extramarital affairs. The boy had subsequently been raised by a hostilely-seductive mother and two sisters, ages 16 and 10, in a setting with a great deal of covert, and often overt, play of seduction between the mother and the patient; she would thus report with a great deal of mirth that it was impossible to stop him from grabbing her breasts all the time.

The boy said he had inhaled gasoline fumes at least once a week for at least two years. The inhalation was from gasoline cans or automobile gas tanks. He would begin inhaling by taking deep breaths of the fumes to the point of becoming dizzy with a “butterfly feeling” and would occasionally miss the “end-point” and “keel over.” The inhalation made him feel as if he were “drifting in space” and as if he were “tingling all over.” At these times he usually heard an “eerie” sound which he could only describe as a humming; this sound would often later increase in intensity for five to 10 minutes when he was breathing fresh air again. When gasoline fumes were not available, the boy inhaled carbon monoxide from the exhaust pipes of cars.

Physical and neurological examinations showed nothing abnormal; but the case was complicated by the history of a head injury the boy had suffered six months before hospital admission. He had been unconscious for about an hour. An EEG before this accident was normal, as was one obtained while on the hospital service. Laboratory work showed results within normal limits.