

Methamphetamine use and oral health

Methamphetamine is an inexpensive, easy-to-make illicit drug. It is known by several street names: “meth,” “speed,” “ice,” “chalk,” “crank,” “fire,” “glass,” “crystal” and “tina.” It is made in tens of thousands of illegal laboratories across the country.

It is an addictive drug that affects the nervous system. It causes high levels of the neurotransmitters norepinephrine, dopamine and serotonin to accumulate in the brain, which stimulates brain cells and produces euphoria. Users may become addicted quickly and use the drug with increasing frequency and in ever-larger doses.

The use of methamphetamine is on the rise in the United States, even though it produces devastating effects on users' health and well-being. Methamphetamine can cause shortness of breath, increased respiration, hyperthermia, nausea, vomiting, diarrhea, an irregular heartbeat, high blood pressure and permanent brain damage. Other effects include irritability, insomnia, confusion, hallucinations, tremors, convulsions, anxiety, paranoia and aggressiveness.

“METH MOUTH”

Rampant tooth decay is another common side effect. Some users describe their teeth as “blackened, stained, rotting, crumbling or falling apart.” This condition often is called “meth mouth.” Often, there is no hope of treating the methamphetamine-damaged teeth, and they are extracted.

The causes of methamphetamine-related tooth decay may include the following:

- the drug's acidic nature;
- its ability to dry the mouth, reducing the amount of protective saliva around the teeth;
- a drug-induced craving for high-calorie carbonated beverages;
- the tendency of users to grind and clench their teeth;
- the duration of the drug's effects (12 hours versus one hour for cocaine), which leads to long periods when users are not likely to clean their teeth.

According to the 2003 National Survey on Drug Use and Health,¹ 12.3 million Americans aged 12 years and older (5.2 percent of the population) had



Figure. Clinical intraoral photograph of a methamphetamine abuser (photograph reproduced with permission of Stephen Wagner, D.D.S.).

tried methamphetamine at least once in their lifetimes, with the majority of past-year users between 18 and 34 years of age. Drug traffickers have aggressively targeted rural areas in an effort to escape law enforcement, and most use is found in the western, southwestern and midwestern United States.

Dentists, parents and others should be concerned if they notice patients, family members or friends—especially teenagers and young adults—who have unaccounted-for and accelerated tooth decay. Heavy users may appear malnourished because methamphetamine acts as an appetite suppressant.

FOR MORE INFORMATION

The Substance Abuse and Mental Health Services Administration's Web site (www.samhsa.gov) provides information, including a substance-abuse treatment facility locator, a physician locator, a calculator to figure out how much it costs to support a drug habit, a guide for parents and a toll-free help line for local treatment centers (1-800-662-HELP).

For more information, visit the National Institute for Drug Abuse Web site at www.nida.nih.gov/Infofacts/methamphetamine.html. ■

1. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. 2003 national survey on drug use and health. Available at: oas.samhsa.gov/nhsda.htm#NHSDAinfo. Accessed Aug. 31, 2005.

Prepared by the ADA Division of Communications, in cooperation with The Journal of the American Dental Association and the ADA Division of Scientific Affairs. Unlike other portions of JADA, this page may be clipped and copied as a handout for patients, without first obtaining reprint permission from the ADA Publishing Division. Any other use, copying or distribution, whether in printed or electronic form, is strictly prohibited without prior written consent of the ADA Publishing Division.

“For the Dental Patient” provides general information on dental treatments to dental patients. It is designed to prompt discussion between dentist and patient about treatment options and does not substitute for the dentist's professional assessment based on the individual patient's needs and desires.