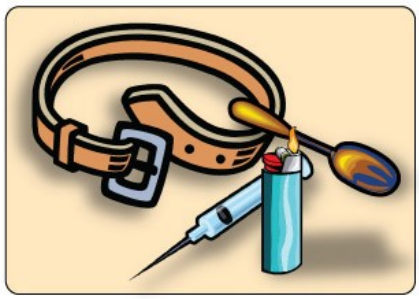
Heroin Abuse and Withdrawal

Heroin is an illegal opiate (*narcotic*) drug. It is very addictive. Once the effects of the drug are felt, the need to use the drug again (known as *craving*) is strong. When the drug is suddenly stopped after using it on a regular basis, significant and painful physical withdrawal symptoms are experienced.

EFFECTS OF HEROIN USE AND ABUSE

The drug produces a profound feeling of pleasure and relaxation (*euphoria*) that lasts for a short time. This is followed by sleepiness and then agitation with craving for more drugs. After a short time of regular use (days or weeks), dependence on the drug is developed. This means the user will become ill without it (*withdrawal*) and needs to keep using the drug to function. This is how fast heroin abuse becomes physical dependence and addiction (*chemical dependency*).



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EFFECTS ON THE BRAIN

Heroin is addictive because it activates regions of the brain that are responsible for producing both the pleasurable sensation of "reward" and physical dependence. Together, these actions account for the user's loss of control and the rapid development of drug dependence.

HOW IT IS USED

- Heroin is a drug that is mostly taken by a shot with a needle (*injection*) in the vein. Using a needle can have harmful effects on the user. Often times, the needle is unclean (*unsterile*), the heroin is contaminated with cutting agents, or heroin is used in combination with other drugs such as alcohol or cocaine.
- In recent years, the purity of street heroin has increased a lot allowing users to “snort” the drug into their noses where it is absorbed through the lining of the nasal passages. You can become addicted this way. Many IV heroin users report they started by snorting.

RELATED PROBLEMS

- Needle sharing can cause AIDS. The AIDS virus is carried in contaminated blood left in the needle, syringe or other drug-related equipment. When unclean needles are used, the AIDS virus is injected into the new user. There is no cure or proven vaccine for AIDS to prevent it.
- Heroin use during pregnancy is associated with stillbirths. It can also increase the chance for miscarriage. Babies born addicted to heroin must undergo withdrawal after birth. These babies show a number of developmental problems.
- Heroin use can cause serious health problems such as liver infection (*hepatitis*), skin abscesses, vein inflammation and heart disease.

SIGNS AND SYMPTOMS

The signs and symptoms of heroin use include:

- Euphoria.
- Drowsiness.
- Respiratory depression (which can progress until breathing stops).
- Small (*constricted*) pupils and nausea.
- Need for increasingly higher doses of the drug to get the same effect.
- Weight loss.
- “Track” marks (*scars*) on arms and legs.
- Emotional instability.

Symptoms of a heroin overdose include:

- Shallow breathing.
- Pinpoint pupils.
- Clammy skin.
- Convulsion.
- Coma.

WITHDRAWAL EFFECTS

Withdrawal symptoms include:

- Watery eyes.
- Runny nose.
- Yawning.
- Loss of appetite.
- Tremors.
- Panic.
- Chills.
- Sweating.
- Nausea.
- Muscle cramps.
- Not being able to sleep well (*insomnia*).
- Depression and mood swings.
- Elevations in blood pressure, pulse, respiratory rate and temperature.

RISK OF OVERDOSE

Because the drug is produced illegally, heroin users risk taking an unusually potent dose (due to differences in purity). This can lead to overdose, coma and possible death. Especially dangerous is the situation where a user has been "clean" (*abstinent*) from using the drug for a period of time and then relapses. Fatal overdoses can occur because the user fails to account for the change in the body's tolerance to the drug.

TREATMENT

There are many treatment options for heroin addiction. They include medications as well as behavioral therapies. Research has demonstrated that many people can successfully stop using heroin when medication is combined with other supportive services. Patients can return to stable and productive lives, living completely free of all narcotics. Some of the medications and other treatment approaches used are:

- Methadone. This is a medication that blocks the effects of heroin for about 24 hours. It has a proven record of success when prescribed at a high enough dosage level for people addicted to heroin.
- Naloxone may be used to treat cases of overdose, as well as naltrexone. Both of these block the effects of morphine, heroin and other opiates. People who have become free of narcotics often take naltrexone to avoid relapse.
- Buprenorphine is now available for treating addiction to heroin and other opiates. This medication offers less risk of addiction. It can be dispensed in the privacy of a doctor's office.
- Several other medications for use in heroin treatment programs are also under study.
- There are many effective behavioral treatments available for heroin addiction. These can include residential and outpatient approaches. 12-step programs, such as Narcotics Anonymous, have also proven to be effective.

HOME CARE INSTRUCTIONS

Some individuals can successfully stop using heroin at home with medically assisted detoxification. This requires following your caregiver's instructions very carefully. This may include use of some of the following medications and therapies:

- Tagamet or Zantac (stomach medicine) can be used for the nausea.
- Imodium can be used for the diarrhea.
- Benadryl can be used for the sleeplessness and restlessness.
- Anxiety medication such as Xanax or Ativan. These must be administered exactly as prescribed, usually with the help of a home caregiver.
- Avoiding dehydration by drinking more fluids than usual. While water alone is fine, any non-alcoholic fluid is okay (soup, juice, etc.).
- Providing quiet, calm support and cooling or warmth as needed.
- Call for emergency help (911 in U.S.) if seizures occur or if the patient is unable to keep liquids down.
- Keep a written record of medications given and times given.

Addiction cannot be cured but it can be treated successfully.

- Treatment centers are listed in the yellow pages under:
  - Substance Abuse.
  - Narcotics Anonymous.
  - Drug Abuse Counseling.
- Most hospitals and clinics can refer you to a specialized care center.
- The US government maintains a toll-free number for obtaining treatment referrals:1-800-662-4357 or 1-800-487-4889 (TDD) and maintains a website: http://findtreatment.samhsa.gov.
- Other websites for additional information are:
  - www.mentalhealth.samhsa.gov.
  - www.nida.gov.
- In Canada treatment resources are listed in each Province with listings available under:
  - The Ministry for Health Services or similar titles.

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