

TRANQUILIZERS or other SEDATIVES ("downers") can cause sudden death. (*Ask your pharmacists for the common (trade)

names of the prescription drugs that contain Propoxyphene.)

7 PAIN PILLS - KIDNEY (50X)

The normal kidney contains millions of parts called NEPHRONS (NEF-ronz) that filter the blood. These delicate parts can be damaged by pain killers. The cells die when abused. This slide shows a section of a kidney which is dying. The cells in the center of the slide (N) are necrotic (dead). They were killed by excessive use of a non-prescription "headache pill" containing

Phenacetin (fuh-NASS-i-tin). Because it is available without prescription, it is often taken without medical advice. It is especially dangerous when mixed with aspirin. That's why the TV commercials say "use only as directed". There is danger even in "ordinary" pills. Phenacetin can also cause fatal liver damage.

8 ASPIRIN - STOMACH (20X)

The normal stomach (seen at the top of the slide) is lined with glands (G). Rough food, germs and acid juices wear away the cells of the stomach lining so fast that the *normal lining is replaced every three days!* But, if the lining is abused, replacement is not fast enough and a sore develops in the lining. This is called an ULCER.

Study the bottom of the slide. Here you can clearly see that the surface has been eroded (smoothed out) destroying the gland and a cavity (U) has cut into the muscle (M) of

the stomach wall. This is a bleeding ulcer – a very painful and serious condition.

Stomach ulcers can result from stress. They also can be caused by abuse of the stomach lining by aspirin, alcohol or heroin. A *combination* of any two of these substances is more than twice as damaging as any of them alone. Although aspirin is the most widely used drug, don't think that there is no danger in its use. Abuse of aspirin accounts for more hospital emergency room visits than heroin abuse.

SUMMARY

The slides you have seen clearly show that drugs *do* affect your body in dangerous ways. But, the hospitals are also full of people with mental disorders whose brains have been permanently damaged by drugs such as "angel dust". These conditions cannot be seen in tissues slides.

Photomicrographs: 1, 3, 5R, 7 courtesy Dr. J. Metzner; 2, 4, 8 courtesy Dr. J. Weber; 6R courtesy Yong-Myun Rho, M.D. - Deputy Chief Medical Examiner, City of New York

If you are abusing your body with drugs, stop now. There are many people in your community who are ready to help you. If you haven't started, don't. It's better to be a "live chicken" than a "dead duck".

DRUG ABUSE (Under the Microscope)

Whenever you put a drug into your body, it changes the way your body works. It seems sensible that people always want the "changes" to mean improvements. No sensible person would pour glue into the gasoline tank of a car to make it run better. You should not take anything that can cause harm to your body. Drug *abusers* do. A doctor may prescribe a drug as a medicine. But people who take drugs for long periods of time, or drugs that are illegal, or combinations of different drugs may permanently harm their bodies. The brains, kidneys, livers, stomachs, hearts or almost any other vital organ can be affected. That's a big

price to pay for a few minutes of "pleasure". You need your body organs for another 60 or 70 years. The fact is *there is no such thing as a "safe" drug*. This lesson set permits you to see how drug abuse can change parts of your body. The first few slides show the effects of some "hard" (illegal) drugs. However, as you read further, you will see that great harm can also come from abusing normally "harmless" drugs. The magnification given, for example slide 1 - (50x) means that the microscope was set at that power when the photograph was taken.

1 HEROIN ABUSE - HEART MUSCLE (50X)

Unlike some other drugs, HEROIN ("junk", "smack") has absolutely *no* medical desirable effects. Anyone who tells you it's good, is probably an abuser trying to sell it to raise money to feed a bad habit. Sooner or later heroin abusers become "mainliners" and inject the drug into their vein *along with bacteria*.

This slide, taken from a dead addict,

shows a pocket of pus (P) right in the middle of the heart. It is a mass of white blood cells feeding on bacteria and dead heart cells. Examine the healthy muscle cells of the heart (M).

How would the oxygen and food supply to body tissues be affected by a heart with pockets of pus in it like this example?

2 COCAINE ABUSE - NASAL EPITHELIUM (20X)

The top of this slide shows some of the layers of cells and the tissues beneath them

that protect the delicate bones of the nose. The bottom of this slide shows what