

Drug and Poison Information Center
(DPIC)

DrugScopes

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Krokodil- The Russian Drug Monster

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One of the newest topics in the drug abuse arena has a lot of people talking. The street preparation is called “Krokodil” which is Russian for crocodile. Reports allege that it is less costly to purchase/make “Krokodil” than to purchase heroin. In some ways “Krokodil” may be more dangerous than heroin. Krokodil has been labeled as the “flesh-eating drug.” In fact “Krokodil” is not a single drug, but an unpredictable mixture of drugs and chemicals. This pattern of abuse was first discovered in Russia several years ago.

It is believed that Krokodil is made by mixing; codeine, gasoline, paint thinner, and alcohol in an attempt to make desomorphine. However, as with many home-made laboratories, desomorphine may not always be what is yielded and can lead to a mixture of undesirable toxic materials. When “Krokodil” is injected it causes the skin to develop scale-like spots, hence the name “Krokodil”. Eventually “Krokodil” can cause significant tissue death (flesh rot) and leads to abscesses and gangrene.

The desired drug desomorphine, is not the cause of the infected skin lesions. Bacteria enter the body tissues damaged by the toxic chemicals injected along with the sought after drug desmorphine. The repeated use of such a biologically toxic mixture goes to show the extent to which chemically dependent people will go to in the search for drug induced euphoria and relief of withdrawal symptoms.

As of last week, none of the suspected cases in the United States have actually been laboratory confirmed Krokodil cases.

A quick Krokodil internet search yielded several news articles about this new trend which does cause alarm. Although Krokodil has raised some concern because it does cause skin conditions, the underlying issue still remains the biggest concern. Intravenous (IV) drug users often use non-sterile injection kits which can lead to skin infections that mimic the skin effects of Krokodil.

Could Krokodil be the start of some scary zombie-drug apocalypse? Likely not, the bottom line is that the heroin and opioid analgesic epidemic is the real apocalyptic concern and has been growing for years. In 2012 the National Survey on Drug Use and Health found the number of people with heroin dependency in 2012 (467,000) was nearly double the number in 2002 (214,000). Centers for Disease Control conducted a survey that shows a 45 percent increase in heroin overdoses from 2006-2010. These statistics don't suggest Krokodil to be the drug of concern, but heroin as the biggest player.

The sensational media approach to Krokodil only serves to divert the attention from more comprehensive solutions.



IV Drug Use Infection

Krokodil use necrosis

References:

<http://www.thedailybeast.com/articles/2013/11/07/behind-the-krokodil-panic.html>

<http://www.wvntv.com/story/23870836/new-reports-suggest-flesh-eating-drug-krokodil-is-in-tri-state-area>

A little "dab" will do ya



Bananna Earwax

Tisha Carson RPh, CSPI



Synonyms: dab, earwax, wax, dank wax, THC wax

Marijuana wax is a highly concentrated form of THC that is created by extracting delta-9-tetrahydrocannabinol (THC) and other cannabinoids out of plant material. There are several extraction processes utilized including cold water extraction, alcohol extraction or butane (BHO) extraction. The concentration of THC in this wax can be 50% to 80%, whereas the THC concentration in the flowers is 12-19%. Because the concentration is so high, even proponents of marijuana use suggest using very small amounts. The products come in various shades of golden brown and have either a gooey or crumbly consistency.

This wax is either placed on top of dried marijuana plant material and smoked, or it is vaporized and inhaled via a vaporizer, bong or electronic cigarette. The vapor emitted is odorless or nearly odorless and there is no open flame.

According to studies conducted by the National Institute on Drug Addiction (NIDA), marijuana can have mental, emotional, physical and behavioral adverse effects. Not only can it distort perception, but it can impair short-term memory and judgment. Individuals who began using marijuana during adolescence were shown to have a profound deficit in connections between brain areas responsible for learning and memory. A large long term study showed that individuals who began smoking heavily in the teen years lost as much as 8 IQ points between the ages of 13 and 38. The cognitive abilities that were lost were not restored in those who quit smoking marijuana as adults. Notably, those who began smoking marijuana as adults did not show significant decline in IQ.

References:

<http://www.drugfree.org/join-together/community-related/more-people-using-e-cigarettes-to-smoke-marijuana>

<http://www.drugabuse.gov/publications/drugfacts/marijuana>

<http://www.drugfree.org/join-together/community-related/more-people-using-e-cigarettes-to-smoke-marijuana>

<http://theweedsnobs.com/ear-wax/>

<http://pralternativetreatment.org/menu/concentrates/>



Consequences of Marijuana Abuse

<http://www.drugabuse.gov/publications/marijuana-abuse/how-does-marijuana-use-affect-your-brain-body>

Acute (present during intoxication)

- Impairs short-term memory
- Impairs attention, judgment, and other cognitive functions
- Impairs coordination and balance
- Increases heart rate
- Psychotic episodes

Persistent (lasting longer than intoxication, but may not be permanent)

- Impairs memory and learning skills
- Sleep impairment

Long-term (cumulative effects of chronic abuse)

- Can lead to addiction
- Increases risk of chronic cough, bronchitis
- Increases risk of schizophrenia in vulnerable individuals
- May increase risk of anxiety, depression, and amotivational syndrome*

*These are often reported co-occurring symptoms/disorders with chronic marijuana use. However, research has not yet determined whether marijuana is causal or just associated with these mental problems.

Hydrocodone Update

Sara Stover PharmD

There has been a lot of recent activity from the FDA regarding hydrocodone – approval of the first hydrocodone-only product and a recommendation to move hydrocodone combination products to Schedule II from Schedule III.

Zohydro™ ER

Zohydro ER (hydrocodone bitartrate) Extended-Release Capsules will be the first hydrocodone product without acetaminophen or aspirin. It is indicated for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. Zohydro ER is not indicated for use as an as-needed analgesic. It will be available in six doses: 10, 15, 20, 30, 40, and 50 mg of hydrocodone. For perspective, Vicodin comes in doses of 5, 7.5 and 10 mg of hydrocodone with 300 mg of acetaminophen. As a hydrocodone-only product, Zohydro ER will be a Schedule II controlled-substance. Hydrocodone combination products such as Vicodin are currently Schedule III but the FDA is proposing to move these products to Schedule II (see below).

Zohydro ER does not have any abuse-deterrent features. The potential for abuse of this product is concerning to many. An FDA Advisory Panel voted 11-2 against approval of the Zohydro ER, but the FDA decided that the benefits of Zohydro ER outweighed its risks and proceeded with approval. The manufacturer of Zohydro ER, Zogenix, has started the development of an abuse deterrent formulation of Zohydro ER but has stated that it is several years away from the market.

Proposal to Move Hydrocodone Combination Products to Schedule II

The FDA wants to move hydrocodone combination products from controlled drug Schedule III to Schedule II. This would put hydrocodone combination products in the same schedule as oxycodone. Schedule II drugs must have a hard-copy written prescription (no phoned-in prescriptions) and may not be refilled. These restrictions are designed to lessen abuse but can be a burden to people who legitimately need the medications. The FDA recommendation to move hydrocodone combination products to Schedule II requires approval by the Department of Health and Human Services and adoption by the Drug Enforcement Agency which has long pushed for this change. It is estimated that this process could take more than one year.

References:

<http://www.medpagetoday.com/PainManagement/PainManagement/42510> - accessed 10/29/2013

<http://www.fda.gov/drugs/drugsafety/ucm372089.htm> - accessed 10/29/2013

<http://www.deadiversion.usdoj.gov/21cfr/21usc/829.htm> - accessed 10/29/2013

<http://www.medpagetoday.com/PublicHealthPolicy/PublicHealth/42473> - accessed 10/29/2013



Prevention Specialist Certification

If you have wondered what the initials ICPS stand for, it is an abbreviation for Internationally Certified Prevention Specialists. These specialists are initially certified by examination via the Ohio Chemical Dependency Board. A reciprocal certificate is automatically awarded when OCPS I (Ohio Certified Prevention Specialist I) or OCPS II certificates are granted by the International Certification and Reciprocity Consortium (IC&RC). A formal application must be submitted and once accepted a candidate can sit for the examination. The examinations tests knowledge and skills about Alcohol, Tobacco and Other Drug (ATOD) abuse prevention on an international level. Continuing education hours must be submitted every 2 years to remain in current standing with the board.

Our Drug and Poison Information Center and our Education & Outreach boasts 6 current ICPS's on staff:

- Alysha Behrman
- Tisha Carson
- Sheila Goertemoeller
- Alysia Longmire
- Rudy Smith and
- Marsha Polk

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