

3315/AB XXI.GP

Eingelangt am: 26.03.2002**BUNDESMINISTERIUM
FÜR SOZIALE SICHERHEIT UND GENERATIONEN**

Ich beantworte die an mich gerichtete schriftliche parlamentarische **Anfrage Nr. 3374/J der Abgeordneten Jakob Auer und Kollegen** wie folgt:

Frage 1:

Die wichtigste Nebenwirkung von anabolen Steroiden ist die androgene Wirkung. Bei Frauen kann es zu Virilisierungen kommen, zum Auftreten von Akne, Heiserkeit und rauchiger Stimme als erstem Zeichen eines bevorstehenden Stimmbruchs, zu Behaarung an den Beinen und in extremen Fällen zu Bartwuchs. In höheren Dosierungen hemmen Anabolika die gonadotrope Funktion der Hypophyse. Das kann bei Frauen zu Zyklusstörungen, etwa Menstruationsverschiebungen, führen, bei Männern vor allem zu Störungen der Hodenfunktion (Spermatogenese). Weiters kann es zu Störungen der Leberfunktion kommen (cholestatischer Ikterus). Werden Anabolika bei Kindern angewandt, so ist auf eine Beschleunigung der Knochenreifung zu achten, die möglicherweise zu einer Reduzierung der zu erwartenden Endgröße führen könnte. Weiters wird Anabolikamissbrauch in Zusammenhang gebracht mit kardiovaskulären Erkrankungen (Herzinfarkt, Schlaganfall).

Weiters darf auf einen Übersichtsartikel des "National Institute on Drug Abuse (NIDA)", einer Teilorganisation des "US.Department of Health and Human Service" zu dieser Thematik verwiesen werden, der als Beilage angeschlossen ist.

Frage 2:

Anabolika bzw. Produkte, die Anabolika enthalten, fallen unter das Arzneimittelgesetz. Das bedeutet, dass sie den Vermarktungsbestimmungen des Arzneimittelrechts unterliegen, die den Vertrieb an eine Genehmigung für das Inverkehr-

bringen binden. Eine Zulassung kann nur erteilt werden, wenn das jeweilige Produkt den Kriterien der Sicherheit, Wirksamkeit und Qualität entspricht. Entsprechende Prüfungen haben ergeben, dass Anabolika nicht den Kriterien der Arzneimittelsicherheit entsprechen.

Zur Überprüfung der aktuellen Marktsituation in Österreich wurde das Forschungsinstitut Seibersdorf mit dem Forschungsauftrag "Untersuchung auf mögliche Verunreinigungen von Nahrungsergänzungsmitteln (Verzehrprodukte) mit anabolen Steroiden (chemische Analyse, gegebenenfalls toxikologische Risikobewertung)" beauftragt.

Die Untersuchungen ergaben, dass einige Produkte derartige Verunreinigungen aufweisen und somit als Arzneimittel einzustufen sind.

Fragen 3 und 4:

Ja, durch die Arzneimittelgesetznovelle 2002 wurden zur weiteren Absicherung explizite Anti-Dopingbestimmungen geschaffen. Insbesondere wurden spezifische Straftatbestände im Hinblick auf Vertrieb und Anwendung von Arzneimitteln zu Dopingzwecken vorgesehen sowie entsprechende Kontrollmöglichkeiten geschaffen, die sich auch auf die Einrichtungen von Sportvereinen und auf Fitnessstudios beziehen. Durch die gleichzeitige Änderung des Rezeptpflichtgesetzes wurde auch der Bereich der unzulässigen Verschreibung von Dopingmitteln erfasst und entsprechend unter Strafe gestellt.

Beilage

**National Institute on Drug Abuse
Research Report Series**

Anabolic Steroid Abuse

Why do people abuse anabolic steroids?

One of the main reasons people give for abusing steroids is to improve their performance in sports. Among competitive bodybuilders, steroid abuse has been estimated to be very high. Among other athletes, the incidence of abuse probably varies depending on the specific sport.

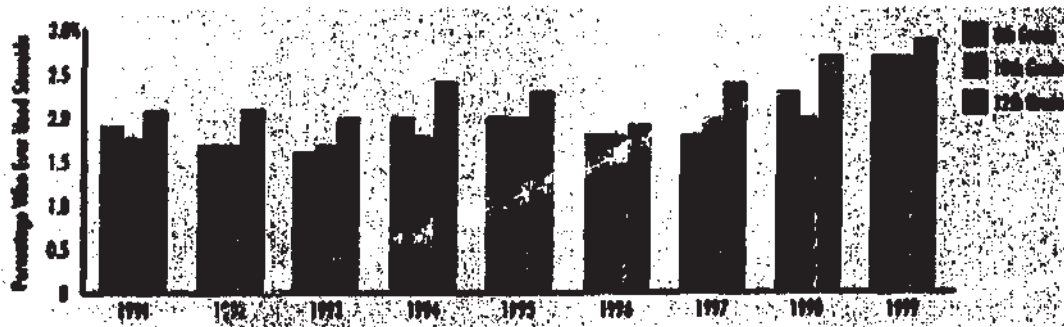
Another reason people give for taking steroids is to increase their muscle size and/or reduce their body fat. This group includes some people who have a behavioral syndrome (muscle dysmorphia) in which a person has a distorted image of his or her body. Men with this condition think that they look small and weak, even if they are large and muscular. Similarly, women with the syndrome think that they look fat and flabby, even though they are actually lean and muscular.

Some people who abuse steroids to boost muscle size have experienced physical or sexual abuse. They are trying to increase their muscle size to protect themselves. In one series of Interviews with male weightlifters, 25 percent who abused steroids reported memories of childhood physical or sexual abuse, compared with none who did not abuse steroids. In a study of women weightlifters, twice as many of those who had been raped reported using anabolic steroids and/or another purported muscle-building drug, compared to those who had not been raped. Moreover, almost all of those who had been raped reported that they markedly increased their bodybuilding activities after the attack. They believed that being bigger and stronger would discourage further attacks because men would find them either intimidating or unattractive.

Finally, some adolescents abuse steroids as part of a pattern of high-risk behaviors. These adolescents also take risks such as drinking and driving, carrying a gun, not wearing a helmet on a motorcycle, and abusing other illicit drugs.

While conditions such as muscle dysmorphia, a history of physical or sexual abuse, or a history of engaging in high-risk behaviors may increase the risk of initiating or continuing steroid abuse, researchers agree that most steroid abusers are psychologically normal when they start abusing the drugs.

Lifetime Use of Steroids: 8th-Graders, 10th-Graders, and Seniors (1991-1999)



How are anabolic steroids used?

Some anabolic steroids are taken orally, others are injected intramuscularly, and still others are provided in gels or creams that are rubbed on the skin. Doses taken by abusers can be 10 to 100 times higher than the doses used for medical conditions.

Steroid abusers typically "stack" the drugs, meaning that they take two or more different anabolic steroids, mixing oral and/or injectable types and sometimes even including compounds that are designed for veterinary use. Abusers think that the different steroids interact to produce an effect on muscle size that is greater than the effects of each drug individually, a theory that has not been tested scientifically.

Often, steroid abusers also "pyramid" their doses in cycles of 6 to 12 weeks. At the beginning of a cycle, the person starts with low doses of the drugs being stacked and then slowly increases the doses. In the second half of the cycle, the doses are slowly decreased to zero. This is sometimes followed by a second cycle in which the person continues to train but without drugs. Abusers believe that pyramiding allows the body time to adjust to the high doses and the drug-free cycle allows the body's hormonal system time to recuperate. As with stacking, the perceived benefits of pyramiding and cycling have not been substantiated scientifically.

What are the health consequences of steroid abuse?

Anabolic steroid abuse has been associated with a wide range of adverse side effects ranging from some that are physically unattractive, such as acne and breast development in men, to others that are life threatening, such as heart attacks and liver cancer. Most are reversible if the abuser stops taking the drugs, but some are permanent.

Possible Health Consequences of Anabolic Steroid Abuse

Most data on the long-term effects of anabolic steroids on humans come from case reports rather than formal epidemiological studies. From the case reports, the incidence of life-threatening effects appears to be low, but serious adverse effects may be under-recognized or under-reported. Data from animal studies seem to support this possibility. One study found that exposing male mice for one-fifth of their lifespan to steroid doses comparable to those taken by human athletes caused a high percentage of premature deaths.

Hormonal system

Steroid abuse disrupts the normal production of hormones in the body, causing both reversible and irreversible changes. Changes that can be reversed include reduced sperm production and shrinking of the testicles (testicular atrophy). Irreversible changes include male-pattern baldness and breast development (gynecomastia). In one study of male bodybuilders, more than half had testicular atrophy, and more than half had gynecomastia. Gynecomastia is thought to occur due to the disruption of normal hormone balance. In the female body, anabolic steroids cause masculinization. Breast size and body fat decrease, the skin becomes coarse, the clitoris enlarges, and the voice deepens. Women may experience excessive growth of body hair but lose scalp hair. With continued administration of steroids, some of these effects are irreversible.

Musculoskeletal system

Rising levels of testosterone and other sex hormones normally trigger the growth spurt that occurs during puberty and adolescence. Subsequently, when these hormones reach certain levels, they signal the bones to stop growing, locking a person into his or her maximum height.

When a child or adolescent takes anabolic steroids, the resulting artificially high sex hormone levels can signal the bones to stop growing sooner than they normally would have done.

Cardiovascular system

Steroid abuse has been associated with cardiovascular diseases (CVD), including heart attacks and strokes, even in athletes younger than 30. Steroids contribute to the development of CVD, partly by changing the levels of lipoproteins that carry cholesterol in the blood. Steroids, particularly the oral types, increase the level

Hormonal system

- men
 - infertility
 - breast development
 - shrinking of the testicles
- women
 - enlargement of the clitoris
 - excessive growth of body hair
- both sexes
 - male-pattern baldness

Musculoskeletal system

- short stature
- tendon rupture

Cardiovascular system

- heart attacks
- enlargement of the heart's left ventricle

Liver

- cancer
- peliosis hepatis

Skin

- acne and cysts
- oily scalp

Infection

- HIV/AIDS
- hepatitis

Psychiatric effects

- homicidal rage
- mania
- delusions

of low-density lipoprotein (LDL) and decrease the level of high-density lipoprotein (HDL). High LDL and low HDL levels increase the risk of atherosclerosis, a condition in which fatty substances are deposited inside arteries and disrupt blood flow. If blood is prevented from reaching the heart, the result can be a heart attack. If blood is prevented from reaching the brain, the result can be a stroke.

Steroids also increase the risk that blood clots will form in blood vessels, potentially disrupting blood flow and damaging the heart muscle so that it does not pump blood effectively.

Liver

Steroid abuse has been associated with liver tumors and a rare condition called peliosis hepatis, in which blood-filled cysts form in the liver. Both the tumors and the cysts sometimes rupture, causing internal bleeding.

Skin

Steroid abuse can cause acne, cysts, and oily hair and skin.

Infection

Many abusers who inject anabolic steroids use nonsterile injection techniques or share contaminated needles with other abusers. In addition, some steroid preparations are manufactured illegally under non-sterile conditions. These factors put abusers at risk for acquiring life-threatening viral infections, such as HIV and hepatitis B and C. Abusers also can develop infective endocarditis, a bacterial illness that causes a potentially fatal inflammation of the inner lining of the heart. Bacterial infections also can cause pain and abscess formation at injection sites.

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