



Research Article

DISADVANTAGES OF ANABOLIC STEROID: A CASE STUDY

Sharma Payal^{1*}, Asthana Alok Kumar²

*1PG Scholar, ²Associate Professor, Department of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi.

ABSTRACT

The word steroid - we all know these are life saving drugs. Steroids have different meanings. Steroids are chemicals, often hormones that your body makes naturally. They help your organs, tissues, and cells do their jobs. Steroids can also refer to man-made medicines. We all know misuse of anything could be fatal. Nowadays anabolic steroids are very common especially in young adults going to gym for making muscles. Gym trainers are giving them steroids by saying and assuring that it will help them to build their muscle and body mass index. In some cases it can become life threatening too. Here in this article I'm going to present such case in which a young boy of just 25 years of age has taken such steroids and lands himself in deep trouble. He was healthy but the moment he joined gym, everything was ruined. He was diagnosed with AVN (Avascular Necrosis) of hip joint. AVN is a deadly pathology in which death of bone tissue occur due to lack of blood supply. Now he is not able to walk on his own and using wheel chair. So this article is basically awareness to young generation who are running behind this stuff and making their life hell.

KEYWORDS: Anabolic Steroid, Deca durabolin, *Basti, Shashtikshali pinda sweda, Tiktaksheer basti.*

INTRODUCTION

Anabolic steroids are very popular among youth nowadays. Everybody especially youngsters wants to look better and they are seeking shortcuts for the same. One such shortcut is use of anabolic steroids. Anabolic Steroids are any drugs chemically related to testosterone, a male hormone that promotes muscle growth.^[1] Anabolic steroids are synthetic, or human-made, variations of the male sex hormone testosterone. The proper term for these compounds is anabolic-androgenic steroids. "Anabolic" refers to muscle building, and "androgenic" refers to increased male sex characteristics. Some common names for anabolic steroids are Gear, Juice, Roids, and Stackers.^[2] Health care providers can prescribe steroids to treat hormonal issues, such as delayed puberty. Steroids can also treat diseases that cause muscle loss, such as cancer and AIDS. But some athletes and bodybuilders misuse these drugs in an attempt to boost performance or improve their physical appearance. The majority of people who misuse steroids are male weightlifters in their 20s or 30s. Anabolic steroid misuse is much less common in women. So, young generation is taking such steroids to gain muscle mass and to look better. They can be taken orally or can be directly injected into muscle. But as we all

know that excessive or inappropriate use of anything would lead to destruction and damage only. This article is also about such case in which a young boy has taken anabolic steroid and he lands himself in a big and deep problem.

Misuse of anabolic steroids

Effect on brain^[3]

- Paranoid (extreme, unreasonable)
- Jealousy
- Extreme irritability and aggression ("roid rage")
- Delusions-false beliefs or ideas
- Impaired judgment
- Mania

Physical effects in males	Physical effects in females
Aggression	Facial hair
Libido changes	acne
insomnia	Deepening of the voice
Hair loss	Roughening of the skin
Tendon damage	Clitoral enlargement
Gynaecomastia (breast enlargement in males)	
Liver damage	
Shrinking testicles	
Prostate enlargement	

How steroids work?

The brain sends chemical signals to the testes, instructing them to produce testosterone.

The testes produce testosterone and release it into the blood. Once they have entered the bloodstream, anabolic steroids act in much the same way as natural testosterone, adding to that already produced by the testes. Testosterone attaches itself to muscle cells boosting growth. Testosterone attaches itself to receptors in a variety of other cells causing different effects around the body. The brain detects the amount of testosterone in the blood through feedback system and regulates the amount produced.^[4]

Case report

A 25 year old patient presented with a chief complaint of difficulty in walking from 7-8 months. According to patient he has joined gym for body building one year ago. After 2-3 months of training his gym instructor has advised him to take steroids in the form of injectables. So he started taking steroid *deca durabolin*. According to him, his gym instructor has injected this injection intramuscularly continuously for eight days. Then after eighth day he was not able to walk properly and then he was on wheel chair. All this made him and his family panic. So he went to allopathic hospital, there he was diagnosed with AVN. He has taken many allopathic medicines for the same but he was not relieved. Now the situation is, he is not able to walk by his own and using wheel chair. So, for the same he has been admitted to CBPACS Hospital.

Deca durabolin

Nandrolone Decanoate (Deca) is widely considered to be the most commonly used injectable anabolic steroid used for performance enhancement. It also has the reputation for being one of the most frequently detected banned substances (metabolites can be detected for periods in excess of one year). Because of its popularity Deca has been widely counterfeited. Due to its relatively low androgenic properties it is also commonly thought to aromatise only at high doses. Deca is commonly used for 'bulking-up' and has a reputation for promoting size and strength. Reports of side effects include hypertension, acne, sexual and reproductive problems. The occurrence of side effects appears to be more common in females and are influenced strongly by the dosage used.^[5]

History of past illness

No specific history present.

Family history

No specific history present

Personal history

Bowel: constipated

Bladder: 4-5times/day, 1time/night

Sleep: disturbed

Appetite: good

Addiction: nil

Diet: vegetarian

Ashtavidha pariksha

Nadi: Prakrit, 80/min, regular

Mala: Vaikrit, irregular, *Vibandh*

Mutra: Prakrit, 4-5times/day

Jihva: Niram

Shabda: Spashta, Prakrit

Sparsha: Samsheetoushna

Driku: Prakrit

Aakruti: Madhyam

Investigations (21/7/2018)

Serum uric acid – 6.5%

CRP (qualitative) – positive

RA Factor (qualitative) – negative

MRI Left Hip joint

Acetabulum shows altered signal intensity with hyperintensity on STIR/T2W images and hypointensity on T1W images. Subtle bone marrow edema noted in the femoral head with no subchondral collapse.

Possibility of

- Tubercular etiology should be kept in view of soft tissue edema and predominantly acetabulum involvement.
- AVN ?? JRA should be ruled out.

AVN

Avascular necrosis of the bones or osteonecrosis results from ischaemia.

Etiopathogenesis^[6]

1. Fracture or dislocation
2. Sickle cell disease
3. Corticosteroid administration
4. Radiation therapy
5. Chronic alcoholism
6. Idiopathic

Here, everyone can clearly see that administration of corticosteroid could lead to AVN.

Clinical feature

Main symptom in early stage is the pain in the affected joint, but as condition got worsen as in above case the patient was not able to walk on his own and was using wheel chair, just after administration of anabolic steroid continuously for 8 days. Initially he was only having pain in the affected joint but later on

his condition got worse and he was not able to walk and was bed ridden.

Management

Patient has taken many allopathic medicines but was not relieved. So, he came to CBPACS hospital on 27/3/2019. He was examined properly and was given oral medications for 2 weeks. Following oral medications were given:

- *Dashmool kwath*-40ml BD with *Tryodashang Guggulu* 3TDS
- *Agnitundi Vati* 2 BD with *Ekangveer Rasa* 2BD
- *M. Brahm Rasayan* 1 tsf BD
- *Yashtimadhu Churna* 2grm + *Pipali Churna* 1grm 1tsf TDS with milk
- *Dhanvantar* oil for LA
- *Triphala Churna* 5grm HS with luke warm water

On 5/4/2019 he was admitted to CBPACS IPD for the *Panchkarma* procedures. Following procedures were done:

- *Shashtik Shali Pinda Sweda (Sarvang)* for 7 days
- *Yoga Basti* with *Dashmool Kwath* and *Dhanvantar Taila* for 7 days
- After 7 days of *Yoga Basti*, he was given *Yapana Basti* for next 7 days with *Rasna saptak Kwath*.
- *Panchtikaksheer Basti* was also given.

Composition of Panchtikaksheer Basti

- *Panchtikta Dravya Kwath (Guduchi, Nimb, Patol, Vasa, Kantkari)* – 150ml
- *Ksheer* (milk) – 130 ml was added in above *Kwath* and *Sidha Ksheer* was prepared.
- *Madhu* (honey) – 5ml
- *Lavan* (salt) – 5gm
- *Ghee* – 20ml
- *Sidha ksheer*- 130ml

Basti pratyagaman kala was 30-45 minutes.

Observation and results

According to patient after all the Ayurvedic treatment he has received, he was relieved upto some extent. Pain was lesser then before and he was able to walk with support. And we have advised patient to take *Panchkarma* and medicines regularly, so that we can improve this condition.

DISCUSSION

So, this article was basically made to enlighten our youth about the fact that these kinds of

shortcuts for body building could be dangerous. In this article we have seen a young boy of 25 years of age has taken anabolic steroid just for the sake of looking great and to increase body muscle mass and just after taking injectable for 8 days, he was completely bed ridden. It was a very deep grief situation for him as well his family. He came to our hospital for management of his problem. We have done whatever we could do and tried our best.

CONCLUSION

In the 21st century where everyone wants to succeed in life and look better. There is a competition among each and everyone and no one wants to wait, they want instant results without doing hard work. Anabolic steroids are such sources which will increase your body mass and muscle mass in short period of time. Young generation is blindly following this trend without even knowing its consequences. So, by this article I want to make aware our young generation about this and its deadliest consequences. I want to ask everyone a question especially to our youth, is it ok for us to do such kind of intoxication to our body and take such huge risk for our life? God has only given us one life and we should value it. Everyone should go through this article and you will realize how a young boy has landed himself into a deep trouble.

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*Address for correspondence

Dr Sharma Payal

PG Scholar, Department of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi.

Email: anupayal809@gmail.com

Cell: 9873731380

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