Steroids are hormones that have both natural (endogenous) and synthetic (exogenous) sources. Natural steroids are derived from the adrenal cortex, testes, and ovaries, while synthetic anabolic steroids are substances similar in nature to male sex hormones. Adrenal cortex hormones, Glucocorticoid, Mineral corticoids, and androgen are the natural steroid sources.

Steroids are used in clinical practice for various purposes, such as replacement therapy, treatment of autoimmune disorders, management of inflammatory diseases, and management of allergic reactions. Medical uses of sex steroids include delaying puberty, improving weight loss in illness, and treating anemia, osteoporosis, and delayed puberty. Steroids are life-saving hormones. The act of using steroids in an dishonest or inappropriate manner is called misuse. Abuse is the synonym for misuse. In our perspective, steroids are misused in various ways. Traditional healers (Kabiraj) misuse steroids by creating puria (mixtures of Glucocorticoid and other bronchodilators) for the management of asthma. They use it as a magical drug for all diseases. Some street hawkers and pharmacy workers sell steroids to young people for gaining weight and looking healthy. Anabolic androgenic steroids are prone to abuse because of their bodybuilding properties. The misuse and abuse of this drug are prevalent, especially in sports and predominately in bodybuilding and weightlifting. Athletes have been known to abuse steroids to enhance performance, build muscle, and improve physical appearance. However, because of its dangerous side effects, many professional sports have banned steroid use and instituted mandatory drug testing, specifically to test for steroid use in professional athletes.

Steroids, similar to testosterone in the body, can cause many health-related problems, including cancer, high blood pressure, irregular heartbeat, and even death. Other negative effects from steroid use are that the user is prone to bouts of aggression and uncontrolled anger, mood swings, paranoia, and severe irritability. Another common trend with steroid use is that people who regularly abuse steroids may seek other medications or drugs in order to alleviate some of the side effects of using the steroids. Because of this, steroids can easily be a gateway drug to more hard-core drug abuse.

Even when taken under a doctor’s care, and in small doses, steroids can cause irreversible damage to the user’s body, even if the user stops taking steroids. This is one of the reasons steroids only have limited therapeutic and medical purposes. Steroids can be toxic, especially when abused or taken in large doses, and can cause permanent damage to the liver and kidneys. Additionally, steroids have been known to cause seizures, coronary artery disease, and other heart-related problems. Heart complications when using steroids are increased with excessive physical exertion, making it even more dangerous for athletes to abuse steroids.

Another common myth about steroids is that taking steroids alone will increase muscle mass and make the user ‘buff’ and built, but nothing could be further from the truth. Even when taking steroids, the user must perform muscle building exercises in order to see any appreciable results besides weight gain. This is something many teens do not understand, believing that simply taking steroids will change the shape of their bodies. This is simply not true. Even with steroid use, hard work and bodybuilding exercises and weight lifting are still required to achieve the physique desired. Steroid use alone will not cause this.

While steroid use might help enhance physical appearance, bodybuilding exercises, when properly performed, will produce the same results without the dangerous side effects. Steroids are not necessary for bodybuilding. Exercise and determination go much further and are much safer than steroids. Steroids are not cheap either. They can be taken orally or intramuscularly through injections. Oil-based steroid injections can remain in the body for as long as 6 months, but the effects of the steroids may only last for a few days. Oral steroids only last for a few hours. The cost per dosage is high, and for the steroid injections may cost as much as $100-500.00 per dose, and many people take more than one dose per day.

Many men may think that taking steroids will make them more virile, but in actually, steroid use can cause genital atrophy, genital swelling, sexual dysfunction, sterility, impotence, prostate enlargement. Very sexy stuff there, right? Bottom line is, the only way to build healthy muscle and mass is to properly exercise and eat a balanced, nutritious diet. Steroids may provide a temporary fix to problems of physique, but death is a price too high to pay to artificially enhance one’s appearance.
**The protocol of steroid withdrawal:** If the duration of steroid is <3wks we can stop the steroid in any time. If the duration is >3wks and dose of steroid is >7.5mg/day to reduce the dose 2.5mg/3-4 days until the dose of steroid reaches below 7.5 mg/day. Then we have to reduce the dose 1mg of steroid every 2-4 wks or we can convert 5mg prednisolone into 20mg hydrocortisone and then reduce the dose of hydrocortisone 2.5mg every week until reduced to 10mg/day. Then after every 2-3 months short synecthin test (SST) or Insulin tolerance test should be done. If the patient pass, that is (Glucocorticoid >550mg) then withdraw the steroid completely. If not or fail to pass. Then the dose of steroid should remain as before and then again after >2-3 months, Short Synecthin Test and Insulin Tolerance Test should be done again.  

**Conclusion:** Misuse and abuse of steroid is a public health problem. Longterm use of steroid in supraphysiological dose may cause permanent atrophy of the adrenal gland. The steroid use is very important and sometimes life-saving. But on the other hand when it is misused or abused it can cause injury to health and demoralization of society. It is the massage that, steroid use needs awareness regarding its good effect and side effect which can minimize the steroid use, reduce the misuse and abuse.

**Suggested Plan For Steroid Replacement In Patients Withdrawing From Chronic Corticosteroid Therapy**

<table>
<thead>
<tr>
<th>Dose (mg pred/day)</th>
<th>&lt;3 wk(*)</th>
<th>Duration of Glucocorticoid Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;7.5 mg</td>
<td>Can stop</td>
<td>Reduce rapidly e.g., 3.5 mg every 3-4 days</td>
</tr>
<tr>
<td>5-7.5 mg</td>
<td>Reduce by 1 mg every 2-4 wk</td>
<td></td>
</tr>
<tr>
<td>&lt;5 mg</td>
<td>Can stop</td>
<td>Reduce by 1 mg every 2-4 wk</td>
</tr>
</tbody>
</table>

* Beware frequent steroid courses, e.g., in asthma pred, Prednisolone; SST, short synecthin test, ITT, insulin tolerance test

**References:**