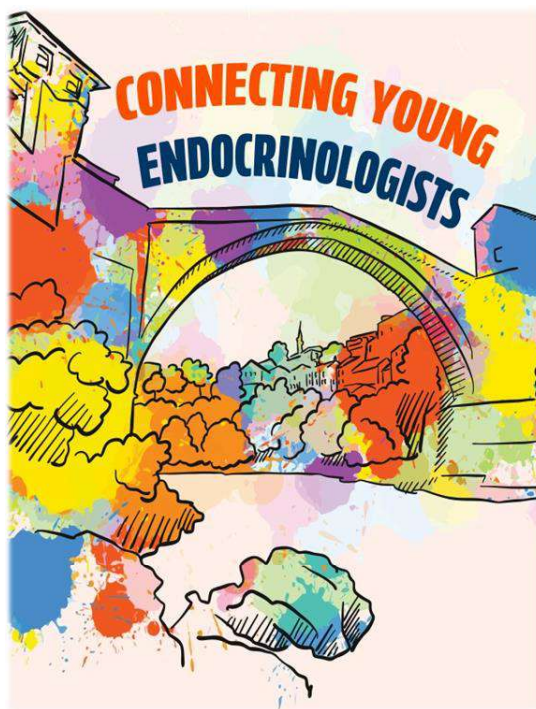




## Peti regionalni simpozij mladih endokrinologa

Mostar, 4. – 6. 4. 2025. godine

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## **The negative effect of anabolic steroids on male reproductive function: a case report**

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**Introduction:** The abuse of anabolic steroids is common in bodybuilding due to their ability to rapidly increase muscle mass. However, they carry health risks, such as cardiovascular problems, liver and kidney dysfunction, hypogonadism, impaired spermatogenesis, and infertility. We demonstrate the harmful effects of anabolic steroids on reproductive function.

**Case report:** A 27-year-old bodybuilder with previously normal reproductive function presented with infertility concerns due to his and his wife's inability to conceive. Hormonal analysis indicated secondary hypogonadism (FSH = 0.9 mIU/mL, LH = 0.1 mIU/mL, testosterone = 0.63 ng/mL, and E2 < 10 pg/mL), while the function of other pituitary axes, including prolactin levels, remained normal. Semen analysis revealed oligozoospermia. Anabolic steroids were discontinued, and a watch-and-wait strategy was recommended. Three months after stopping steroids, his gonadal axis remained suppressed. After six months of observation, hormonal improvement was noted (FSH = 1.0 mIU/mL, LH = 2.2 mIU/mL, testosterone = 2.42 ng/mL, and E2 < 10 pg/mL), but without improvement in spermogram. Full recovery, with normozoospermia, was achieved after one year. Today, his wife is pregnant.

**Conclusion:** Anabolic steroid abuse in bodybuilding can significantly impair male reproductive function. In this case, full recovery occurred after one year of steroid cessation.

**Keywords:** anabolic steroids, infertility, bodybuilder.