Utjecaj steroida na srce

Steroids impact on the heart

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Uvod: Anabolici uzrokuju vjerojatnost razvoja infarkta srca, povećanje vrijednosti kolesterola, razvoj ateroskleroze, oštećenje jetre, hipertrofiju prostate, ćelavost, ginekomastiju u muškaraca i izostanak ovulacije u žena.¹⁻³

Prikaz slučaja: Bolesnik star 48 godina primljen preko hitne službe u slici akutnog infarkta miokarda s ST-elevacijom antero-septolateralne stijenke. Intenzivno se bavi bodybuildingom. Uzima već dvije godine 4 vrste steroida i.m. (Testosteron 1 gr. 2 x tj. i.m., Metan 2 x tj. Trembolan 2x tj. i Nordipin). Povremeno radi pauze. Na dan prijema na biciklu odvozio 30 km, odradio intenzivan trening u teretani u trajanju od 45 minuta, dvije utakmice malog nogometa. U večernjim satima osjetio pre-kordijalne bolove uz zadihu, preznojavaње i mučninu. Pozvao je odmah hitnu medicinsku pomoć te se u Klinički bolnički centar javlja 60 minuta od početka bolova. 12-kanalni EKG kod dolaska utvrdio je sinus ritam frekvencije 66/min, lijevu električnu os, elevaciju ST segmenta za 3 mm od V2 do V5. U laboratorijskim nalazima se razabiru; TnT 994 ng/L, AST 247 U/L, ALT 219 U/L, CK 3366 U/L, LDH 346 U/L. Pristupa se koronarografiji desno transradijalno, gdje se nalazi subokluzivna trombotska stenoza proksimalne LAD s distalnom embolizacijom. Učini se perkutana koronarna intervencija na LAD, te se postavi suportivna žica LCX u distalnu LAD. Nakon bolusa Integrilina dolazi do rekanalizacije distalne LAD. Distalni dio stenta se optimizira NC balonom. Ostale koronarne arterije bez stenoza. Postintervencijski tijek je protekao bez komplikacija. Elektrokardiografski se prati potpuna rezolucija ST segmenta. Ehokardiografski LVEF oko 50%. Nakon otpusta iz bolnice bolesnik se vraća uzimanju steroida. Nakon dva mjeseca od otpusta ponovno se javlja u hitnu službu poradi zbog bolova u prsnoj koži. Učinjenom obradom nije nađeno akutnog koronarnog zbivanja. Na redovnu kardiološku kontrolu donosi nalaz ergometrije, bez ishemijske.

Zaključak: Uporaba anaboličkih steroida rašireno je među bodybuilderima amaterima. U Republici Hrvatskoj nema registriranih anaboličkih steroida, ali se «na crno» može nabaviti sav arsenal anaboličkih steroida. Svaka osoba koja čvrsto odlučuje uzimati anaboličke steroide to će i učiniti na legalan ili ilegalan način, ali mora biti u potpunosti upoznata s mogućim posljedicama. Za konačni zaključak utjecaja steroida na infarkt miokarda potrebne su kliničke studije. Smatramo da bi edukacija o opasnosti korištenja takvih sredstava morala biti sastavni dio nastave tjelesnog i zdravstvenog odgoja u srednjim školama.

Introduction: Anabolics are responsible for heavy disturbances in male and female organisms. Probability of heart attack is multiplying, anabolics are causing raise of blood cholesterol, development of atherosclerosis, liver damage, prostate hypertrophy, boldness, aggressive behavior, gynecomastia in men and ovulation disturbances in women.¹⁻³

Case report: Forty-eight-year-old male, admitted to Emergency Department for acute antero-septal ST segment elevation myocardial infarction. He is intensively training in bodybuilding and taking four types of steroids intramuscularly (Testosteron 1 gr. 2 x weekly, Metan 2 x weekly, Trembolan 2 x weekly, Nordipin). On a day he was admitted to hospital, he went cycling for 30 km, he made bodybuilding training in gym for 45 minutes and played two matches of football. Late that night our patient started feeling chest pain, nausea, heavy breathing. He was admitted to hospital sixty minutes after the pain started. 12-lead ECG on arrival: SR 66/min, ST segment elevation for 3 mm in V2 to V5. Laboratory results: cTnT 994 ng/L, AST 247 U/L, ALT 219 u/L, CPK 3366 U/L, LDH 346 U/L. Coronarography was made transradially and subocclusive thrombotic stenosis of proximal LAD with distal embolization was found. Percutaneous coronary intervention was made on LAD and was implanted with optimal result. After the Integrilin bolus LAD was reanalyzed with optimal result. Other coronary arteries were without stenosis. Post interventional period was without complication. Total resolution of ST segment was found on ECG. On echocardiography we found mildly reduced systolic function (LVEF 50%). After discharge from hospital patient went back to his old habits of taking steroids. Two months after hospital discharge he had another episode of chest pain but there were no signs of acute coronary syndrome. Seven days later his exercise stress test was unremarkable.

Conclusion: Anabolic steroids use is widely spread among bodybuilders-amateurs. Anabolic-androgenic steroids are not available on free market but one can get a whole arsenal of these drugs illegally. Person determined to take steroids will do it one way or another, but we have to let these people know what the possible consequences are. Clinical studies on this matter should be made. It is our opinion that education in primary and secondary schools about steroids usage in our environment is necessity.

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