



Gym benefits?

¿Beneficios del gimnasio?

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We had a recent admission in our clinic of a 33-year-old man with a frontal fracture after a syncope-related hit. The patient happened to have an acute massive pulmonary embolism with severe right ventricular failure, with final survival after seven days in hospital, including three days of intensive care.

This young man is a bodybuilder with gym-strain training tailored by an instructor and a nutritionist who prescribed polypharmacy including clenbuterol, oxymetholone, carnitine betaine anhydrous, L-carnitine tartrate, glycine propionyl L-carnitine, creatine, and glutamine, plus several plant-based powders.

On the same discharge day, we received another one, a 29-year-old male with palpitations; another gym-staff and esthetics-oriented nutritionist victim, receiving indications of strain escalation, high carbohydrate diet, and polypharmacy with beta-alanine, creatine monohydrate, caffeine anhydrous, *Juniperus communis*, hordenine HCL, dimethylethanolamine, *Rauwolfia vomitoria* extract (alpha yohimbine), and *Huperzine serrata*, on a bottle called Psychotic Blend. This patient had sinus tachycardia, ventricular extrasystoles, hyperglycemia, and up to three times the upper normal level of creatine phosphokinase (CPK). The patient came accompanied by his girlfriend, who also had a mesomorphic habitus and the same treatment. He was not surprised when we informed him about the significant CPK elevation. He explained to us that the purpose of muscle damage is to accelerate muscle buildup.

Who doubts the benefits of physical training, including gym strain, with obvious wellness and life expectancy gain, especially through

cardiovascular risk reduction?¹ Nonetheless, these athletes receive dangerous instructions from trainers and nutritionists, oriented towards beauty over health, recommending wrong diets, and polypharmacy that exposes them to potentially harmful drug interactions.²

The problem exposed here discloses several issues, starting with the personal need for beauty over the need for early death prevention, the trainers with strategies of fast muscle growth based on muscle damage, multiple drug compounds masked as nutritional supplements, and nutritionists prescribing them.

The cardiological community must be prepared to attend to severe complications from the training of healthy and sick persons under the advice of these professionals. I also mention sick patients as I remember a case of a man with coronary bypass on oral anticoagulation who had a catastrophic complication after a prescribed intense 3-hour daily strain training.

REFERENCES

1. Shailendra P, Baldock KL, Li LSK, Bennie JA, Boyle T. Resistance training and mortality risk: a systematic review and meta-analysis. *Am J Prev Med.* 2022; 63 (2): 277-285. doi: 10.1016/j.amepre.2022.03.020
2. Mantri S, Agarwal S, Jaiswal A, Yelne S, Prasad R, Wanjari MB. Bodybuilding: a comprehensive review of performance-enhancing substance use and public health implications. *Cureus.* 2023; 15 (7): e41600. doi: 10.7759/cureus.41600

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