Prevalence of low serum testosterone in men with type II diabetes and erectile dysfunction.

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Erectile dysfunction is a frequent complication of type II diabetes and negatively impacts quality of life. Objective: to evaluate the prevalence of low serum testosterone in type II diabetic male with erectile dysfunction (ED). Methods: 124 men with type II diabetes, aged 44-72 years, with a duration of diabetes of 3-26 years were interviewed (self-reported questionnaires) for erectile dysfunction, together with serum measurement of total testosterone (reference values 300-900 ng/dl), several biochemical investigations and the exclusion of testicular or pituitary pathology. Results: 48% reported moderate to severe erectile dysfunction. Total testosterone mean values in the studied group were 402±189 ng/dl. Diabetic male with erectile dysfunction presented low serum total testosterone values (<300 ng/dl) in 39% cases, compared to diabetic male without erectile dysfunction -only 16% had low testosterone levels. ED was correlated with the duration of diabetes (Odds Ratio OR 3.2 CI 1.1-6.4), BMI>30 kg/m2 (OR 1.7 CI 1.03-5.5), antihypertensive and lipid-lowering therapies (OR 2.17 CI 1.3-5.8), age (1.5 CI 1.01-3.3). In diabetes patients with erectile dysfunction, low total testosterone was significantly positively associated with visceral obesity (OR 2.2 CI 1.05-5.2), poor diabetes control HbA1c (OR 1.7 CI 1.05-3.4), age (OR1.5 CI 1.1-4.03) and cardiovascular disease (OR 1.48 CI 1.06-3.95). Conclusion: Low serum total testosterone is highly prevalent in type II diabetes patients with erectile dysfunction, especially in those with abdominal obesity, cardiovascular complications and poorly controlled diabetes. Low serum testosterone in diabetic male with erectile dysfunction could be a marker of cardiovascular disease.