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Research Article

Erectile Dysfunction In Young People With Type I Diabetes: Prevalence, Comorbidities And Therapeutic Response.

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INTRODUCTION & OBJECTIVES

Erectile dysfunction (ED) is a disorder defined as the consistent or recurrent inability to achieve and or maintain a penile erection sufficient for sexual satisfaction. ED occurs on average 10-15 years earlier in men with diabetes and is poorly studied in type I diabetes (DM I), being generally more severe and less responsive to therapy, namely phosphodiesterase type 5 inhibitors (PDE5I), leading to a worse quality of sexual activity in young individuals. We aim to assess the prevalence of patients with DM and their patients with glycemic control years and with the presence of other microvascular complications aged ≤60 years and also to assess rates of and predictors of response to oral treatment in ED men naïve for PDE5i.

MATERIALS & METHODS

Eligibility criteria were patients followed in the Diabetology Unit: age ≥18 and ≤60 years, sexually active in the last 6 months and not taking PDE5I; excluded if: severe comorbidities unrelated to DM complications, such as neoplasms, neurological diseases or psychiatric and drug abuse and urologic surgery or pelvic trauma in the last 6 months. The assessment of ED was performed using the International Index of Erectile Function (IIEF-5). Glycemic control was evaluated by the value of glycated hemoglobin (HbA1c) and classic CV risk factors were analyzed. Patients completed the International Index of Erectile Function (IIEF) at baseline and after 3 months of PDE5i treatment. Statistical analysis with SPSSv.27

RESULTS

Of the 207 individuals followed in the diabetology unit, 115 were eligible and completed the IIEF-5. A mean age of 37 years, with 75% aged ≤46 years. The mean BMI was 24.87 kg/m2 and 15.7% were smokers. ED was present in 42.1% of the individuals and about 1.9% with severe ED, 6.5% moderate ED, 15.9% mild to moderate ED and 17.8% mild ED. ED was statistically significantly associated with the presence of diabetic retinopathy (p=0.021) while the presence of nephropathy was associated with the severity of ED (p=0.04). time since the diagnosis of DM1 were associated with the presence of ED (p=0.012), as well as with a greater severity. Age, smoking and BMI were not associated with ED in this study, as well as the presence of other comorbidities (high blood pressure, coronary heart disease). The last values of glycemic control (HbA1c) did not present a direct correlation with the IIEF5 score (p=0.21), but in all subjects with moderate and severe ED, HbA1c>7.5%. IIEF-EF improved in all groups after PDE5i(p<0.001), but scores were higher in patients with better glycemic control. Headache was the most frequent adverse event reported.

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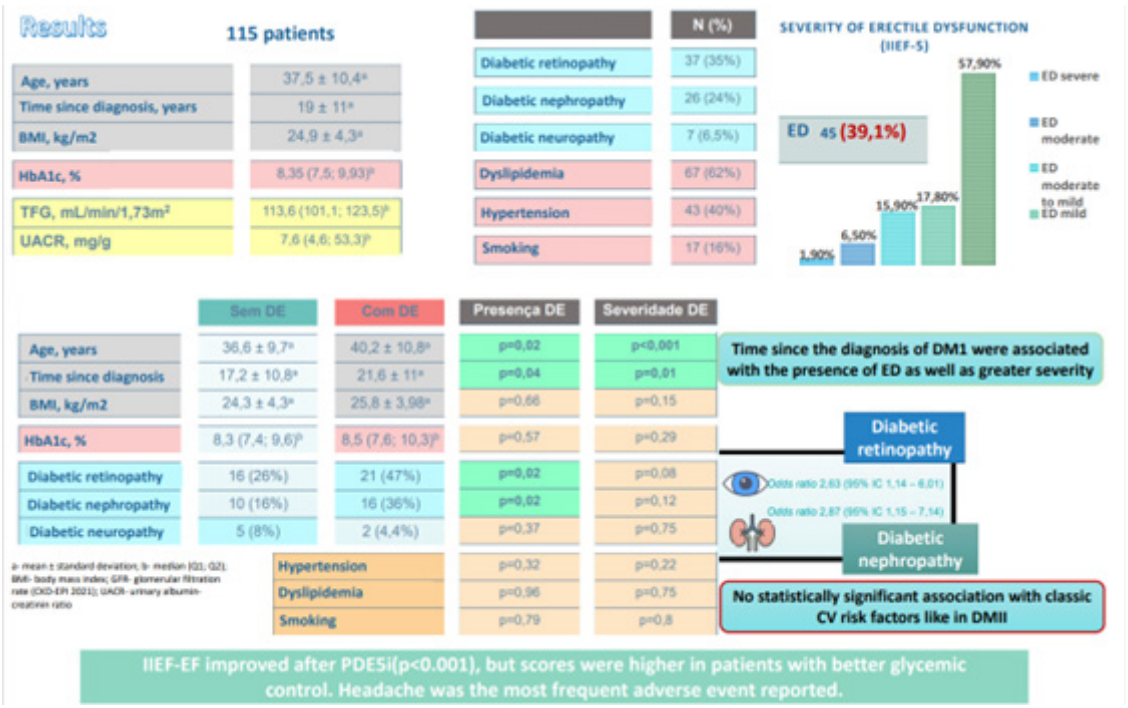
Figure 1.



CONCLUSIONS

ED can be early in individuals with DM, and ED research should be performed routinely, regardless of age, especially in patients with other organ lesions. Psychosocial disorders are common in young adults and may be exponentiated by DM I, which may be a major factor in the high frequency of ED in this study.

The lack of correlation between ED and the last HbA1c value is explained, since this value only reflects the glycemic control in the previous months, not allowing to infer the microvascular involvement of DM1 with several years of evolution and poor glycemic control in the past.

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