

Prevalence of Alcoholism on Patients with Type 1 Diabetes Mellitus Followed on a Health Care Reference Centre

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Abstract

Type 1 diabetes accounts for 5 to 10% of all diabetes mellitus cases and is characterized by the autoimmune destruction of pancreatic β cells, leading to insulin production deficiency. Alcoholism, a problematic pattern of alcohol use, is highly prevalent in Brazilian society, and a risk factor for poor glycemic control and treatment adherence on diabetic patients. In this study, we analyse data about alcohol consumption among these patients, followed on Hospital das Clínicas da Unicamp, collected through a questionnaire.

Key words: type 1 diabetes mellitus, alcoholism, CAGE

Introduction

Type 1 diabetes accounts for 5 to 10% of all diabetic individuals and leads to a deficiency in insulin production by autoimmune destruction of pancreatic β cells.¹ Alcoholism is a problematic pattern of alcohol use leading to clinically significant impairment or distress². In Brazil, in 2004, there was a prevalence of 7,29% among men and 1,41% among women.³

There is now quite some evidence that chronic heavy consumption of alcohol has deleterious effect on metabolic control and may even be associated with impaired insulin resistance, therefore being a risk factor for developing type 2 diabetes mellitus.⁴ On diabetics, it is associated to poor glycemic control and treatment adherence.⁵ However, there are still very few data concerning the effect of alcoholism on patients with type 1 diabetes.

The main objective of this study was to analyse the alcohol consumption among the type 1 diabetic patients followed at Hospital das Clínicas da Universidade Estadual de Campinas.

Results and Discussion

Data were collected from August 2014 to March 2015, through interviews with 51 patients. The questionnaire included questions about identification, clinical features of the type 1 diabetes and its complications and comorbidities, and the CAGE questionnaire, a validated tool for identifying patients with alcohol use disorders.⁶

The sample consisted of 51 patients diagnosed with type 1 diabetes mellitus, being 45,1% (23) male and 54,9% (28), female. 50,98% (26) of the

patients were white, 33,33% (17) were mixed-race and 15,69% (8) were black. The average age was 35,54 years, with a standard deviation of 11,59. The average time of diabetes was 20,2 years, with a standard deviation of 9,96.

42 of the patients had a CAGE score of 0, 6 of them had a CAGE score of 1 and 3 had a CAGE score of 2. No patient scored 3 or 4 on the CAGE questionnaire.

Factors significantly related to a higher CAGE score (2) included: longer time of diabetes, older age, heavier weight, being mixed-race, smoking, arterial hypertension and nephropathy.

Conclusions

On the studied sample, the prevalence of alcoholism had little significance. The results indicate the necessity of larger samples, in order to confirm what has been found.

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¹American Diabetes Association. Diagnosis and Classification of Diabetes Mellitus. *Diabetes Care*, 27, (supl 1): S5-S10, jan 2004.

²American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders. 5ª ed. Arlington, VA, APA, 2013.

³World Health Organization. Prevalence of alcohol use disorders: Data by country. Disponível em: <<http://apps.who.int/gho/data/node.main.A1213>>. Acesso em 08 de abril de 2014.

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⁵ENGLER, P.A.; RAMSEY, S.E.; SMITH, R.J. Alcohol use of diabetes patients: The need for assessment and intervention. *Acta Diabetol*. 50(2): 93-99. Abril de 2013.

⁶Masur J, Monteiro MG. Validation of the "CAGE" alcoholism screening test in a Brazilian psychiatric inpatient hospital setting. *Braz J Med Biol Res*. 1983;16(3):189-282