Comment: Increased risk for type 2 diabetes in spinal cord injury

The prevalence of diabetes is increasing globally, with an estimated 371 million individuals affected and 4.8 million people who died due to diabetes in 2012.1 Type 2 diabetes accounts for at least 90% of all cases of diabetes, and the number of people with type 2 diabetes is increasing in every country.1 Abnormalities of carbohydrate and lipid metabolism are more common among people in the spinal cord injury (SCI) population than in the able-bodied population.2 There is increased morbidity and mortality due to type 2 diabetes in SCI.

In this issue of Neurology®, Cragg et al.3 evaluate the association between SCI and type 2 diabetes in a large representative sample and determine whether there is an association irrespective of known risk factors for type 2 diabetes.

After adjustment for both sex and age, Cragg et al.3 found an increased odds of type 2 diabetes (adjusted odds ratio [OR] 1.66 [95% confidence interval (CI) 1.16–2.36]) in SCI. The heightened odds persisted after adjusting for smoking status, hypertension status, body mass index, daily physical activity, alcohol intake, and daily consumption of fruits and vegetables (fully adjusted OR 2.45 [1.34, 4.47]). The authors also performed a sensitivity analysis to test the likelihood that type 2 diabetes preceded SCI. The increased odds of type 2 diabetes persisted but had very wide CIs due to the reduced power.3

The results from this study confirm the clinical observations of increased incidence of type 2 diabetes in SCI. The findings will refocus our daily practice efforts regarding diet, glucose levels, and type 2 diabetes at SCI centers. The results will also change our priorities regarding preventive health strategies and planning long-term care for people with SCI.


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