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Abstract

OBJECTIVE:

To compare the cardiometabolic risk (CMR) profile of premenopausal and postmenopausal women with spinal cord injury (SCI).

METHOD:

Post hoc analysis of a multicenter cross-sectional study assessing CMR. Seventeen women with ASIA Impairment Scale (AIS) A or B SCI between C5 and T12 were stratified into 2 groups according to menopausal status (11 premenopausal vs 6 postmenopausal women). Data collected included demographic, social, medical, menopausal, hormone use, and menstrual histories. Assessments included physical, anthropometric, and blood pressure measures; fasting serum total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), triglycerides (TG), and hemoglobin A1C (Hb1Ac); calculated low-density lipoprotein cholesterol (LDL-C); and an oral glucose tolerance test.

RESULTS:

The premenopausal group had a mean age of 32.4 years compared with 56.0 years in the postmenopausal group. Similar group findings included body mass index (BMI) (22.4 vs 22.2), HDL-C (52.5 vs 53 mg/dL), HbA1c (4.9 vs 5.1%), fasting blood glucose (FBG) (79.3 vs 84.8 mg/dL), and systolic blood pressure (SBP) (104.6 vs 111.8 mm Hg). TG, TC and LDL-C were significantly higher in postmenopausal group (55.7 vs 101.8 mg/dL, \( P = .01 \); 158.3 vs 191.6 mg/dL, \( P = .04 \); 94.7 vs 118.2 mg/dL, \( P = .04 \)).

CONCLUSIONS:

The findings from this study suggest that postmenopausal women with SCI have CMR trends similar to those observed in nondisabled women, characterized by increases in TG, TC, and LDL-C despite favorable BMIs and glycemic indices. Even though the present study includes significant limitations, future evidence may also suggest that heightened surveillance and guideline-driven interventions are indicated for perimenopausal and postmenopausal women with SCI.

KEYWORDS:

cardiometabolic risk, menopause, spinal cord injury