Abstract

Objective: To assess iodine nutrition and thyroid function in Mexican childbearing age women. Methods: 101 childbearing age women (21.7 ± 3.5 years) randomly selected from the university student population participated in this cross-sectional study. TSH, thyroid hormones, anti-thyroid antibodies, thyroid volume, iodine intake, and urinary iodine concentration (UIC) were assessed. The knowledge about the importance of iodine in nutrition was also evaluated by using questionnaires. Results: TSH median (interquartile range) value was 1.9 (1.4-2.5) mIU/L, while FT4 median value was 9.0 (8.3- 9.6) g/dL. The median FT3 and total rT3 values were 3.3 pg/mL and 40.1 ng/dL, respectively. The prevalence of subclinical hypothyroidism (serum TSH >4.5 mIU/L) and of positive anti-thyroid antibodies were 2.9% and <5.9%, respectively. Median thyroid volume was 5.6 mL and none of the subjects were diagnosed with goiter. Median urinary iodine concentration was 146 (104-180) g/L. As for the knowledge of iodine nutrition, only 37.6% consi- dered that a pregnant woman needs more dietary iodine than a non pregnant woman, while 43.6% recognized that the lack of iodine can cause mental retardation in children. Conclusions: Prevalence of thyroid test function abnormalities was low in this population and the median UIC indicates adequate iodine intake. We also found a poor knowledge about the importance iodine nutrition in the studied population.

Keywords

Iodine nutrition, Thyroid hormones, Childbearing age women, Urinary iodine concentration.