BACKGROUND AND OBJECTIVES: Iodine nutritional status in pregnant women is important for neuronal development of the fetus, and may vary depending on the geographic area. Thyroid function and urinary iodine excretion were therefore assessed in pregnant women from three different provinces of a large Spanish autonomous community.

PATIENTS AND METHODS: A descriptive study was conducted in the three healthcare areas of Burgos, Avila, and Ponferrada on 1,200 women in the first trimester of pregnancy. The study consisted of a survey and thyroid hormone and urinary iodine measurements.

RESULTS: Use of iodized salt and iodine-containing pharmacological compounds was reported by 40% and 17% of pregnant women respectively. Median urinary iodine excretion in the total group was 121 mcg/L, with lower values in Burgos (117 mcg/L) and Ponferrada (118 mcg/L) and higher levels in Avila (130 mcg/L). Urinary iodine excretion was less than 100 mcg/L in 34% of women and was undetectable in 3.3%. Excretion levels lower than 150 mcg/L were found in 69.8% of women. Low thyroxine levels were detected in 1.1%, and thyrotropin levels were increased in 4.7%.

CONCLUSIONS: Iodine deficiency currently exists in pregnant women from different areas of our large autonomous community. Consumption of iodized salt and iodine-containing pharmacological compounds is not widely established. It would be of great interest to conduct studies in other geographic areas and to advise an increased iodine intake in women who plan to become pregnant and in pregnant women from the very start of pregnancy.

Copyright © 2011 SEEN. Published by Elsevier Espana. All rights reserved.

PMID: 21820982 [PubMed - indexed for MEDLINE]