World Academy of Science, Engineering and Technology
International Journal of Bioengineering and Life Sciences
Vol:14, No:12, 2020

Prevalence of Endemic Goiter in School Children and Women of Reproductive Age Group during Post Salt Iodization Period in Andro Constituency, Imphal-East District, Manipur, India

Authors : Y. Suchitra Devi, L. Hemchandra Singh

Abstract : Background: Because of its geographical location, Manipur lies in the conventional goiter endemic belt. During the post salt iodization period, endemic goiter was prevalent in the valley districts of Manipur without iodine deficiency. Objectives: The present study aim at the prevalence of goiter among school children (6-12 years) and women of reproductive age group (above 20 years) of Andro Assembly Constituency, Imphal- East, Manipur, India. Method: A total of 3992 individuals were clinically examined for thyroid enlargement. Hormones like TSH, FT_4, FT_3, and Anti-TPO, Anti-Tg were tested, UIC, USCN, testing of iodine in water and salt. Result: Total goiter prevalence was found to be 13.98%, median urinary iodine level was 166.0 µg/l, mean urinary thiocyanate concentration was 0.726 ± 0.408, mean water iodine concentration was 3.843 ± 2.291, and all the salt samples were above 15ppm. 6 out of 41 children and 93 out of 176 women were auto antibody positive. 41 children and 176 women were tested for TSH, FT_4, and FT_3, which shows disturbance in hormone level. Conclusion: The present study showed that the region is mildly goiter endemic without biochemical iodine deficiency.

Keywords : goiter, TSH, FT_4, FT_3, anti-TPO, anti-Tg, UIC, USCN, school children and women of reproductive age
Conference Title : ICTHRD 2020 : International Conference on Thyroid Hormones and Related Disorders
Conference Location : London, United Kingdom
Conference Dates : December 10-11, 2020