



PRESENTATION ABSTRACT

Indices of Thyroid Function: Use in Clinical Practice and for Iodine Population Studies

Elizabeth N. Pearce, M.D., M.Sc.— Boston University School of Medicine, Boston, MA

Abstract

This presentation will review the regulation of thyroid hormone secretion, the routine clinical uses of thyroid function tests, inter- and intra-individual variations in thyroid function, and definitions of overt and subclinical thyroid dysfunction. Special cases in which routine thyroid function reference ranges do not apply will be covered; these include the neonatal period, pregnancy, and in the setting of nonthyroidal illness. Relationships between thyroid function and iodine status in population studies will be discussed. Finally, the use of thyroglobulin as an indicator of population iodine status will be reviewed.

References

1. Hollowell JG, Staehling NW, Flanders WD, Hannon WH, Gunter EW, Spencer CA, Braverman LE. Serum TSH, T(4), and thyroid antibodies in the United States population (1988 to 1994): National Health and Nutrition Examination Survey (NHANES III). *J Clin Endocrinol Metab.* 2002;87(2):489-99.
2. Stagnaro-Green A, Pearce E. Thyroid disorders in pregnancy. *Nat Rev Endocrinol.* 2012;8(11):650-8.
3. Zimmermann MB, Aeberli I, Andersson M, Assey V, Yorg JA, Jooste P, Jukić T, Kartono D, Kusić Z, Pretell E, San Luis TO Jr, Untoro J, Timmer A. Thyroglobulin is a sensitive measure of both deficient and excess iodine intakes in children and indicates no adverse effects on thyroid function in the UIC range of 100-299 µg/L: a UNICEF/ICCIDD study group report. *J Clin Endocrinol Metab.* 2013;98(3):1271-80.

