Thyroid profile in infants with nutritional marasmus.

Hayes J, Rossell M, Vaca M, Justiniano G, Landivar Z, Urioste G.

Hospital Santa Cruz. Santa Cruz de la Sierra, Bolivia.

Introduction:

Nutritional marasmus is still prevalent in developing countries. Disorders of thyroid function have been reported in patients with marasmus.
The objective of the present study is to evaluate the levels of thyroid hormones in infants diagnosed with marasmus at the time of diagnosis and after reaching a normal weight for age and sex.

Material and methods:

Prospective study of patients from one to 11 months of age, diagnosed with nutritional marasmus.
Plasma levels of thyrotropin (TSH), thyroxine (T4) and triiodothyronine (T3) were determined at the time of diagnosis and after reaching normal weight for age and sex, when properly fed.

Results:

We studied 47 patients with nutritional marasmus; 41 (87% of the total) had altered thyroid function at the time of diagnosis: In 29 (71% of those affected), there were low T3 values, with T4 levels being normal; 12 (29%) showed low values of T3 and T4. TSH levels were normal in this group of patients.
Values of T3 and T4 were normalized when patients reached a weight adequate for age and sex.

Discussion:

The alterations of the thyroid function observed in infants with nutritional marasmus (the decrease in T3 and T4 levels were evidenced), do not require replacement therapy with thyroid hormone, since once the patients reach the adequate weight for the age and sex, the thyroid profile normalizes.