

# NEWBORNS OF MOTHERS AFFECTED BY AUTOIMMUNE THYROID DISEASE

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## OBJECTIVES

Evaluation of thyroid function in neonates born from mothers affected by autoimmune thyroid disease in order to define if a precise follow-up is necessary for these children.

The influence of time of evolution of maternal disease, maternal thyroglobuline (TGAb) and thyroid peroxidase antibody (TPOAb) and L-thyroxine therapy during pregnancy on neonatal thyroid function was also investigated.

## METHODS

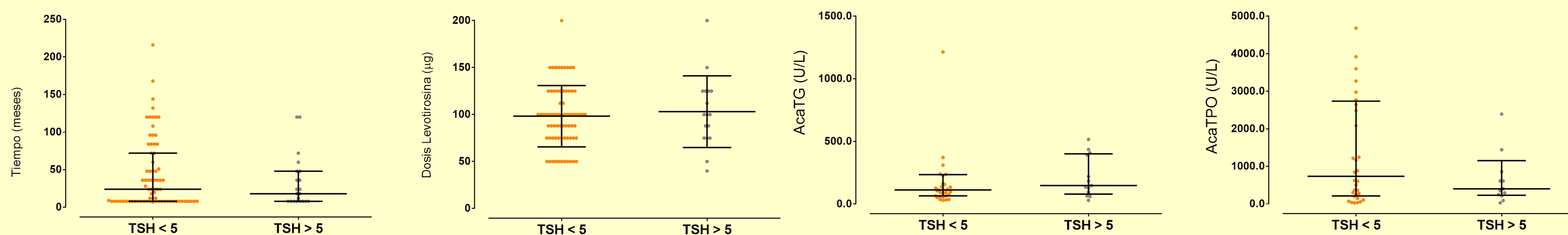
204 term neonates were tested for thyroid function by measurement of free thyroxine (FT4) and thyroid stimulating hormone (TSH) in the first month of life.

182 neonates were born from mothers affected by Chronic Lymphocytic Thyroiditis or Hashimoto Thyroiditis (HT) and 22 from mothers with Graves' Disease (GD).

TPOAb and TGAb were measured in all patients, Thyroid Stimulating Immunoglobulin (TSI) were also measured in newborns from mothers with GD.

Data concerning maternal TGAb and TPOAb during pregnancy and maternal replacement therapy with L-thyroxine during pregnancy were retrospectively collected.

## Graphs and tables



## RESULTS

58 neonates from 204 (28,4%) showed a mild increase of TSH value (>5 mcU/ml) at any of the different determinations. 52 were born from mothers with HT and 6 were born from mothers with Graves' Disease.

Only 4 cases from 204 (1,96%) showed an increase of TSH value more than 10 mcU/ml, at the age of 48 hours of life (2 cases), and one month old (2 cases). All of them were newborns from mothers with HT.

In all of them, a spontaneous complete normalisation of TSH value was observed within the next determinations and they did not required L-thyroxine replacement therapy.

## CONCLUSIONS

Transient mild elevation of serum TSH above the normal reference value for age is frequently observed in the first month of life in infants born from mothers affected by autoimmune thyroid diseases, but not so many need L-thyroxine replacement therapy.

Follow-up is still recommended in newborns from mothers with Grave's disease (we have only a few cases in this serie), but we don't recomend any follow-up in newborns from mothers with chronic lymphocytic thyroiditis (Hashimoto Thyroiditis) more than newborn screening of hypothyroidism.

## References

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