SUMMARY
Objective: To determine the incidence of persistent hypothyroidism (PH) after a long follow-up in 45 patients with postpartum thyroiditis (PPT) from a non selected population of 641 pregnant women (incidence of PPT: 7.8%) and the clinical and biochemical factors associated with PPT evolution.

Design & Patients: The 45 women who developed PPT were followed for 8.1 ± 2.2 years after delivery.

Measurements: Age at delivery, family and personal history, smoking, newborn gender, breastfeeding, and PPT course were recorded. Serum TSH and free T4 concentrations and antithyroid antibodies were evaluated at each visit. PH was considered when it persisted one year after being diagnosed.

Results: Fourteen of 45 patients with PPT developed PH with a probability of 56% after a PPT episode with hypothyroidism. None of the patients who developed hyperthyroidism alone during PPT evolved to PH. PH risk was higher if the newborn was a girl (R.R: 3.88) and increase for each additional TSH unit during PPT and for every additional year of the mother’s age.

Conclusions: The probability of developing PH after a PPT with hypothyroidism episode was 56% in present study. PPT screening in all women permitted the investigators to establish replacement therapy with thyroxine, if necessary, before a new pregnancy.

COMMENT
Postpartum thyroiditis (PPT) occurs in approximately 5-10% of women after delivery (~8% in present study). More importantly perhaps is the notion that PPT occurs in 50% of women who have thyroid auto-antibodies. The clinical expression of PPT is highly variable, from transient biochemical abnormalities of thyroid function to severe thyroid dysfunction. In women with PPT who present thyroid dysfunction, approximately one third of them presents transient hyperthyroidism alone usually in the first months after delivery, another third presents hypothyroidism alone usually after six months postpartum, and finally only one third presents the classical form of PPT, with transient hyperthyroidism followed by transient hypothyroidism and spontaneous recovery of a normal thyroid function after one year. Furthermore, among women with PPT who develop hypothyroidism (alone or in the combined form), a certain percentage does not recover a normal thyroid function and is, hence, at risk of remaining hypothyroid or developing permanent hypothyroidism (PH) later. It is considered that the risk of PH is observed in 12-61% of women with PPT, three to nine years postpartum. PH is detrimental for the mother’s health (physical and psychological), for her ability to raise her child in good health, and finally for subsequent pregnancies, especially when left undiagnosed and untreated. The present study deals with this question and shows a high risk of PH (over 50%) when
the episode of PPT was associated with hypothyroidism. (Daniel Glinoer MD, PhD)

See Figure below

FIG. 1. Cumulative incidence of persistent hypothyroidism in the three groups of postpartum thyroiditis (PPT) clinical course, estimated by the Kaplan-Meier method. Group 1, Patients who presented hyperthyroidism alone during PPT episode \( n = 10 \); Group 2, patients who presented hyperthyroidism followed by hypothyroidism during PPT episode \( n = 16 \); Group 3, patients who presented hypothyroidism alone during PPT episode \( n = 19 \). Group 1: ...... Group 2: —— Group 3: ——.