

## Pregnant Women and Their Newborns: Among the Victims of T<sub>4</sub> Replacement

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### Introduction

A gynecologist recently contacted me out of concern for his pregnant wife and their gestating baby. His wife is hypothyroid and her endocrinologist is adamant that she should not use any approach to thyroid hormone therapy other than T<sub>4</sub> replacement. The gynecologist said that his wife's fatigue has improved with the treatment, but she's still mildly fatigued. And like many other patients on T<sub>4</sub> replacement, she has had no improvement whatever in other symptoms that she developed for the first time soon after she underwent a thyroidectomy.

The wife's persisting symptoms include dry skin, cold hands and feet, and depression. She also cannot lose an extra 15 lbs (6.8 kgs) she gained within six months after starting T<sub>4</sub> replacement. The gynecologist gave the endocrinologist a copy of an article I wrote for *Thyroid Science*<sup>[1]</sup> in which I cited studies that show that patients on T<sub>4</sub> replacement gain weight they cannot lose. Of course, this attempt to educate the endocrinologist was to no avail. Still, he was adamant that the wife use no approach to thyroid hormone therapy other than T<sub>4</sub> replacement. The gynecologist and his wife sat and listened to the famous refrain of endocrinologists: "You just need to diet and exercise." And they witnessed his mind close tightly, like a pupil exposed to light, when they informed him that she doesn't over eat and she works out at a gym six-days each week.

Fortunately, the gynecologist saw that the endocrinologist is a fanatical devotee not of his wife's welfare but of T<sub>4</sub> replacement. He phoned me after making an appointment for his wife with a local natural medicine doctor who is well known for treating patients with natural desiccated thyroid.

The reason the gynecologist contacted me is that he was bothered about a report he had read.

The report was published in a Scandinavian medical journal on obstetrics and gynecology, one of the journals he reads to keep up on research in his specialty.<sup>[5]</sup> His impression was that the study, conducted in Sweden, showed that hypothyroid women and their newborns were likely to have health problems as a result of the mother's hypothyroidism—*despite* her undergoing thyroid hormone therapy. He feared that even if his wife begins using desiccated thyroid, she and their developing baby are at risk of harm.

After reading the report, I phoned him back. I asked him to carefully consider what the study actually showed. The women in the study and their newborns did not develop health problems *despite* thyroid hormone therapy; they did so *because of* the type of thyroid hormone therapy they used. That therapy was T<sub>4</sub> replacement.

The study didn't involve approaches to thyroid hormone therapy other than T<sub>4</sub> replacement. But based on many years of clinical experience with pregnant hypothyroid women, I believe the gynecologist will have saved his wife and their baby from potential harm by switching from the endocrinologist's treatment to that of the natural medicine doctor.

### Swedish Study of Women Who Used Thyroxine

The Swedish study included pregnant women on thyroid hormone therapy and their newborns. Some of the women reported using thyroid hormone early in their pregnancies and others received prescriptions for thyroid hormone late in their pregnancies. The total number of these women was 9,866. Their infants totaled 10,055. The women who used thyroid hormone therapy during their pregnancies were compared to all women in the Swedish population who gave birth during the same time span (July 1, 1995 to December 31,

2004) and their newborns.

It's important to note that the women in the study used "thyroxine," which is also called "T<sub>4</sub>." And with a high degree of probability, the women were restricted to replacement doses of T<sub>4</sub>, that is, doses that kept their TSH levels within the current reference range in Sweden.

The purpose of the study was to learn whether women who took thyroid hormone during their pregnancies and their newborns fared better or worse than women who didn't take thyroid hormone and their newborns. The researchers looked for any adverse effects, such as congenital malformations among the newborns and pregnancy complications among the mothers.

Compared to women who didn't use T<sub>4</sub> during their pregnancies, the women who did had a higher rate of preeclampsia. They also had more preexisting and gestational diabetes, cesarean sections, and they required more inductions of labor. And preterm birth was "marginally increased" among the women who used T<sub>4</sub>.

Eight of the women's infants had neonatal thyroid disease. Seven had "thyreotoxicosis," but a description of the other infant's disease wasn't available. *A statistically significant number of the infants had congenital malformations.*

The researchers' conclusion was, "Women on thyroid substitution during pregnancy had an increased risk for some pregnancy complications, but their infants were only slightly affected."<sup>[5]</sup> A more accurate conclusion is this: Both women restricted to T<sub>4</sub> replacement and their newborns had a statistically significant higher incidence of abnormalities.

The researchers, of course, didn't take their results as an indication that T<sub>4</sub> replacement didn't protect the health and well-being of the pregnant hypothyroid women and the newborns. But that's truly what the results mean, for if T<sub>4</sub> replacement were an effective substitute for the women's own internally-produced thyroid hormone, they and their newborns would have had no more abnormalities than the other women who didn't use thyroid hormone. The culprit in this unfortunate case is the T<sub>4</sub> replacement the Swedish women were restricted to; *T<sub>4</sub> replacement is simply inadequate for and thus harmful to a significant percentage of newborns and their mothers during their pregnancies.*

### ***Harm from Inadequate Thyroid Hormone Treatment During Pregnancy***

It is clear that if a pregnant woman isn't treated at all for hypothyroidism, her newborn is likely to be harmed. The most commonly cited adverse effects in newborns are brain abnormalities and resulting psychological symptoms. Also, when the mother is hypothyroid during pregnancy, the *severity* of her thyroid hormone deficiency is likely to be proportional to the harm done to her newborn.<sup>[3][4]</sup>

That the severity of the mother's hypothyroidism is related to the degree of harm to her newborn means this: The newborn is likely to suffer adverse effects not only if the mother does not use thyroid hormone at all during the pregnancy, but also if her therapy is inadequate. It's a matter of degrees.

In a pediatric study in Italy, newborns with congenital hypothyroidism had impaired psychological function, despite them being treated with T<sub>4</sub> replacement. When their doctors treated them with T<sub>4</sub>/T<sub>3</sub> replacement, the infants' psychological impairment did not improve.<sup>[2]</sup> *Obviously, "replacement" doses—that is, doses that kept the infants' TSH levels within the current reference range in the region of Italy where the study was done—were inadequate for relieving impaired psychological functioning that resulted from their congenital hypothyroidism.*

My question is, If these infants had been treated with higher dosages, would these dosages have relieved their impaired psychological function? The pediatricians who conducted the study noted that the two replacement therapies [T<sub>4</sub> and T<sub>4</sub>/T<sub>3</sub> replacement] were inadequate to ensure normal brain development in the infants: ". . . in our experience, the 2 types of treatment, at least at the doses we used, show the same efficacy but are not optimal in an early normalization of the neuropsychological performances of CH [congenitally hypothyroid] infants."<sup>[4,p.1059]</sup>

Yet the pediatricians expressed apprehension of using higher dosages. They wrote, for example, ". . . the fear of provoking undesired side effects and the lack of any reference data in the literature for infants in the first months of life prompted us to use doses of T<sub>3</sub> that may have been insufficient and a T<sub>4</sub>:T<sub>3</sub> ratio that was not perhaps optimal."<sup>[4,p.1059]</sup>

These pediatricians' reasons for not using higher doses of T<sub>3</sub> seem reasonable. But to me, the

reasons appear to be face saving. The reason I say this is that the policy that dominates other conventional medical specialities also dominates in pediatric care. That policy is “nothing risked, nothing gained,” so assertively treat patients with drugs even when there is substantial evidence that they may harm them patients.

This policy, if applied to thyroid hormone therapy—which unlike most pharmaceutical therapies is harmless even when most patients’ TSH levels are suppressed<sup>[6]</sup>—might have salvaged the infants’ psychological functioning. But another factor the pediatricians didn’t mention almost certainly caused them to use only the replacement approach—*despite them reporting that the infants remained psychologically impaired!*

That factor is the risk of brutal consequences for using a thyroid hormone therapy other than replacement. For clinicians in most parts of the world today to use doses of thyroid hormone higher than replacement doses risks punitive results that enforcer endocrinologists ensure medical regulatory boards will doll out to the clinicians. The risk of those dreaded consequences intimidates most clinicians into using only replacement doses. And the clinicians’ compliance ensures that vast rivers of revenue continue to flow to Big Pharma from the sale of scores of millions of TSH assays.

### Conclusion

A statistically significant percentage of the mothers and their newborns in the Swedish study suffered harm because T<sub>4</sub> replacement was ineffective for them. The harm to them may have been worse had the mothers had no thyroid hormone therapy at all. Then again, for some patients, T<sub>4</sub> replacement is little better than no treatment at all. For many others, it’s helpful but far from fully effective, and therefore harmful.<sup>[6]</sup>

It’s possible, then, that effective thyroid hormone therapy would have protected the Swedish mothers and infants from the harm they suffered from T<sub>4</sub> replacement. Of course, as I said, the pediatricians didn’t test any alternate thyroid hormone therapy in the study. What is important is that the study showed that T<sub>4</sub> replacement harmed many

mothers and their newborns. This proof of harm from T<sub>4</sub> replacement would compel me to ask my hypothyroid wife, were she pregnant, to gamble on another approach to thyroid hormone therapy. The gynecologist feels the same way, and his wife will soon see the local natural medicine doctor.

It’s often hard for me to bear that adults are commonly harmed by the ineffectiveness of T<sub>4</sub> replacement. *But newborns, too?* In my firm opinion, subjecting newborns to harm by restricting their hypothyroid mothers to T<sub>4</sub> replacement isn’t just a scientific and humanitarian issue; to me, it’s also a moral one.

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