

Drug-funded thyroid study prompts wrong headed conclusions

When older women are given estrogen replacement therapy, they often find that their thyroid levels are decreased. A common sense reaction would be to discontinue the ERT in favor of a more natural approach that would cause fewer side effects.

Instead, researchers are now saying that, based on a study published in the June 7, 2001 issue of the *New England Journal of Medicine*, the best approach might be to increase their thyroid replacement drugs!

That isn't a surprising conclusion, considering that the research project was funded by Knoll Pharmaceutical, which manufactures thyroid-replacement hormone.

Dr. Baha M. Arafah studied 36 postmenopausal women on estrogen therapy and found that -- of the 25 who were also on thyroid hormone -- 10 showed signs that their thyroid levels declined after starting on estrogen.

Thyroid hormone is used to treat hypothyroidism, a condition in which the body's levels of the hormone are too low. The thyroid gland acts like a barometer -- churning out, as needed, hormones that help regulate a range of vital functions including heart rate, blood pressure, body temperature and metabolism. An underactive or non-functioning gland produces little or no thyroid hormone, triggering symptoms such as sluggishness, chills, constipation and weight gain.

Increases in estrogen, such as those that occur in pregnancy, lead to dips in thyroid levels. Among women with normal thyroid function, the gland can compensate and produce more thyroid hormone. But this barometer does not work in women with hypothyroidism.

Knowing that women with hypothyroidism need their hormone replacement increased during pregnancy, Arafah looked at whether older women on synthetic estrogen would have similar needs. He found that while these women do not appear to see the thyroid declines pregnant women do, at least some may require a thyroid boost.

Arafah recommends that women receiving both types of hormone replacement have their thyroid levels checked within 12 weeks of starting on estrogen -- particularly women who are on thyroid hormone as part of thyroid cancer treatment.

Experts estimate that as many as 10% of women aged 65 and older have some degree of hypothyroidism. And since many women are on estrogen for menopausal symptoms, as well as for birth control, there is likely a "substantial number" on estrogen and thyroid hormone, journal editor Dr. Robert D. Utiger notes in an accompanying editorial.

While he agrees that some women may need their thyroid hormone increased while on estrogen, Utiger adds that they may also require a decrease once they go off of it.

"It is prudent," he writes, "to reassess their thyroid function several months after estrogen therapy is either initiated or discontinued."

SOURCE: *New England Journal of Medicine* 2001;344:1743-1749, 1784-1785.