



Metis Research, Inc.
A West Virginia Non-Profit Corporation

Members of Scottish Parliament

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Re: PE01463 Effective thyroid and adrenal testing, diagnosis and treatment

Dear Members:

The solution to the systematic abuse of people, mostly women, having continuing symptoms of hypothyroidism in Scotland and around the world, is proper policy statements and practice guidelines (hereafter statements). These statements not only take a myopic view of the causes of these symptoms, they improperly dismiss appropriate diagnostics and proscribe appropriate therapies. These statements have four issues on the periphery of medicine that combine to systematically deny proper care. These issues are (1) definition of hypothyroidism, (2) the exclusion of medical evidence, (3) the assumption that 95% of people are "normal," and (4) the enforcement of improper policy statements.

There is confusion between physician and patient because there are two classes of definitions for "hypothyroidism." The linguistically proper definition is "the clinical consequences of deficient secretion by the thyroid gland." The broad, improper, but popular definition is "the clinical consequences of insufficient thyroid hormone in the body." Before post thyroid physiology (which is functionally between the thyroid gland and the production of symptoms) was discovered [1-3] or suspected [4-6] these definitions were effectively identical. However, for the last forty years, they are not. The proper definition implicates only the thyroid gland. The improper definition implicates the thyroid gland or the post thyroid physiology. However, both are still used interchangeably because the knowledge of the existence of post thyroid physiology has been suppressed by the medical establishment.

The harm of these dual definitions comes when the patient thinks in terms of the popular definition and the physician uses the proper definition. His tests for hypothyroidism do not test post thyroid functions. Consequently, he claims the patient does not have hypothyroidism while the patient claims she does by the symptoms, which may be caused by the untested deficiencies in the post thyroid physiology. However, if the operative definition were specified, either one, and logical consistency maintained, then there would be no problem [7] and no need for this petition.

Medicine has no qualms about suppressing valuable evidence. Now it has an establishment approved evidence suppression philosophy, evidence-based medicine (EBM). The public face promises the "best" medical evidence. The other face suppresses according to a substantially unscientific ranking of evidence by the type of

study. [8,9] Indeed, if the study was not produced from a randomized clinical trial, its consideration is not likely, for example: [10]

The EBM compliant review (meta-analysis) of hypothyroidism found 503 studies. As shown (figure 1 [10]) 492 studies (98%) were dismissed. These studies included (a) warnings that the prescribed thyroxine (T4) only therapy does not work for all patients, [11,12] (b) the proscribed T3 was discovered and is more active than T4, [13] (c) euthyroid (the thyroid is OK) hypometabolism (fatigued anyway) verified, treated successfully with the now proscribed therapy triiodothyronine (T3), [4,5] (d) discoveries of post thyroid physiology (peripheral metabolism and peripheral cellular hormone reception), [1-3] and (e) a study of patients failed by endocrinology and successfully treated with the now proscribed desiccated thyroid hormone replacement. [14]

To augment the disclosed patient counterexamples, [4,14] Thyroid Patient Advocacy has a registry of patient counterexamples with about 2,000 entries. Although dismissed by medicine, they are integral to all science. [15,16] Indeed, Sir Karl Popper's respected philosophy of science [17] places counterexamples above all confirmations, the only evidence considered by medicine. Thus, the meta-analyses [10,18,19] confirming the thyroxine-only therapy are incorrect. Since most patients are treated successfully with T4-only, the error is in the breadth of the proscription. There is no logical rationale for proscribing all T3 containing therapies for post thyroid deficiencies. The production, reception, and use of T3 by post thyroid physiology confirms this over-breadth. [1-3] The many counterexamples also confirm. [4,14]

The inappropriate dismissal of studies is only one EBM fault. [20-22] EBM provides us no assurance that reviewed studies are scientific. Rather, EBM depends upon honesty. There is no check upon the subject selection logically supporting the study conclusion or the consequential statements' proscriptions. There is no check upon the data analysis logically supporting the study conclusions or statements' proscriptions. But it does apply the "best" label deserving or not. EBM can escalate mere opinion to "best" evidence, thereby producing a falsely heightened credibility. Indeed, EBM has been found to be more of a marketing tool than helpful to practitioners. [23]

Many tests, specifically thyroid and adrenal tests, are based upon the assumption that 95% of the tested population is normal, 2.5% are low, and 2.5% are high. The significance of these numbers is statistical. Normal is minus two standard deviations to plus two standard deviations. Thus, a patient who is almost hypothyroid is nominally the same as one who is almost hyperthyroid. And adrenal normality may go from nearly Addison's disease to almost Cushing's disease. Perhaps, normality is not correct because the 95% assumption is not right. Certainly, countries outside of the UK, have changed their normal range to fit reality better. But low-normal, almost-Addison's disease adrenal function, i.e., adrenal fatigue, is not treated.

Opinion also rules the variation due to taking T3 is not safe. [24] This opinion is currently accepted because it is not ethical to test "dangerous" concepts. However, since T3 decay has a "half-life," an exponential decay analysis is appropriate. Such analyses show that for the customary multiple doses per day produce variation ranges less than the normal range and even as low as the strong circadian variation range.

Physicians are not as free and independent as popularly believed. They are subject to discipline by their medical council or board. This potential discipline generally forces physicians' practices to comply with statements, right or wrong. Effectively, the statements are not voluntary suggestions, but mandatory demands, as recognized by court rulings. [25,26] Thus, when an errant statement is guiding medical practice, medical ethics [27-29] are forgotten and the patient suffers.

Thus, the diagnosis and treatment of the continuing symptoms of hypothyroidism suffer from many shortcomings of medical professionalism: (a) lack of linguistic precision; (b) suppression of valid evidence, including experiences of patient counterexamples; (c) promoting illogic; (d) assuming universal honesty and integrity; and (e) providing credibility to questionable science, assumptions, and opinion. Consequently, there are measures that can potentially be legislated:

The Scottish Intercollegiate Guidelines Network (SIGN) must be guided and controlled by the following measures:

1. All guidelines and policy statements must contain definitions for critical and readily misunderstood words and terms. If such definitions were supplied in statements, the present problem would not be. [7] Failing to provide said definitions require the courts to accept the injured party's version of definitions.
2. The exclusion of evidence supported by evidence-based medicine must be prohibited since it can exclude valuable evidence and is generally contrary to Scottish evidentiary customs and case law.
3. Medical associations and government must be liable for monetary damages and personal damages for unsubstantiated and wrong medical policy statements and guidelines. The Restatement (Second) of Torts paragraph 324A has been used against errant associations who provide misdirection to professionals that cause third parties (patients) harm. Further, see paragraphs 310 and 311 for misrepresentations that cause harm.
4. Medical associations and government must be liable for proscribing proper medical care, i.e., they are a third party barring a rescue by a second party of the injured person. See Restatement (Second) of Torts paragraph 326.

Concluding, my studies of this situation have found no positive step taken by organized medical practice to mitigate the chronic debilitating symptoms of hypothyroidism once the thyroid function tests have declared the patient properly cared for or in good health. Most physicians fear for their family well being and careers, and consequently, refuse to properly care for patients. They provide bogus excuses for their failures instead. [24]

Sincerely, Eric K. Pritchard, M.Sc.

Endnotes:

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28. ***Be Honest and Open and Act With Integrity.*** The UK General Medical Council (2006)
29. ***Provide a Good Standard of Practice and Care. Keep Your Professional Knowledge and Skills up to Date.*** The UK General Medical Council (2006)