PE1463/XX

John E Midgley Letter of 1 August 2014

I refer to the petition in progress labelled "Effective Thyroid and Adrenal Testing and diagnosis" at present under review. I attach links, below, to a paper we have recently published. Though complex in its argument, the summary conclusion is that TSH testing is subject to variable ranges, depending on individual characteristics such as age, weight, thyroid gland size, and if a person is on thyroxine therapy for hypothyroidism. This is supremely important for future diagnostic strategies regarding thyroid function testing, in which Scotland could play a leading role by instigating appropriate clinical trials. I hope you can include this within the petition's information to help aid progress in this respect. It also provides a basis for our growing realization that a significant proportion of patients on thyroxine therapy alone do not fare well, and the reasons for this. We are in the process of publishing a further paper detailing this problem.

http://www.ncbi.nlm.nih.gov/pubmed/24953754

http://onlinelibrary.wiley.com/doi/10.1111/cen.12527/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+9th+Aug+from+10-2+BST+for+essential+maintenance.+Pay+Per+View+will+be+unavailable+from+10-6+BST.

The following is a précis of the paper—

Our latest paper examines the relationships between TSH, Free T4 and Free T3 in patients, relating the results to such variables as body mass, age, size of working thyroid gland, and whether or not a patient is on T4 therapy for hypothyroidism. NB patients using T3 either in conjunction with T4, or T3 alone were excluded from the study. What it proves is that there is no such thing as an overarching TSH range that is appropriate for everyone, and that the range is affected according to the effect of independent influences such as age, body mass, size of working thyroid volume and whether someone is on T4 or not. The T4 therapy range is very much lower than the "normal" untreated and sits around the 1 or lower mark. The 3-4 upper level that works for the normal person is not satisfactory and can indicate undertreatment. We're also finding that people with no thyroid working at all cannot easily regain normal FT3 with T4 alone and that TSH suppression often has to happen, and in some people no amount of T4 will regain normal FT3 levels. Recent reviews by the gurus now admit that some people cannot handle T4 only and regain health.

Sincerely

John Midgley