

'Natural thyroid'

Query: What information is there on natural thyroid?

We have had several requests for information on 'natural thyroid', and it does seem to be the case that there is a small number of clinicians, especially in the USA, who continue to prescribe thyroid extract ('natural thyroid') for their patients. This is undoubtedly not mainstream practice.¹

A recent clinical trial in the New England Journal of Medicine re-ignited the debate.² In this trial, patients given a combination of thyroxine (T4) plus liothyronine (T3) appeared to do better in some respects than those given T4 only. While on the face of it this supports the 'natural thyroid' practitioners, there are some significant caveats raised by an editorial accompanying the study¹ (by a well respected UK endocrinologist). If nothing else, the ratio of T3 to T4 in the apparently ideal preparation differs significantly from that in thyroid extract, which has an excess of T3. Also, this is one study only and needs to be repeated to verify the results.

An elderly (in literature terms!) paper in the BMJ is quoted in the clinical trial³ - this is a case-series report with no numbers and very little else in terms of what would now be considered valid data. This paper also may be used in some cases to support the 'natural thyroid' argument, although the authors actually used a combination of synthetic hormones.

The author of the editorial notes that the recent trial involved only 33 patients, and discusses a number reasons why there needs to be more information, including larger clinical studies, before there would be justification for any change in routine clinical practice.

References

1. Toft AD. Thyroid hormone replacement -- one hormone or two? [editorial] N.Engl.J.Med 1999; 340: 469-70
2. Bunevicius R, et al. Effects of thyroxine as compared with thyroxine plus triiodothyronine in patients with hypothyroidism. *ibid*: 424-9
3. Smith RN, et al. Controlled clinical trial of combined triiodothyronine and thyroxine in the treatment of hypothyroidism. *BMJ* 1970;4(728): 145-8

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