



## **Switching your patient from Liothyronine (L-T3) to Levothyroxine (L-T4)?**

### **Answering GP's frequently asked questions**

The BTA is aware that some health authorities are advising GPs to switch patients on Liothyronine (L-T3) to Levothyroxine (L-T4). Whilst we appreciate the commercial imperative to cut prescription costs, like you, our first concern is that in all cases the clinical needs of the patient should come before financial considerations. This frequently asked questions (FAQS) sheet has been produced for GPs who are considering switching patients from L-T3 to L-T4.

#### **Should my patient be switched from L-T3 to L-T4?**

The decision to switch from L-T3 to L-T4 should be based on clinical considerations and should be reached in conjunction with the patient after a discussion of the risks and benefits. Patients established on L-T3 who continue to derive benefit from its use should continue on L-T3. However, patients with uncertain benefits should be considered for a switch to L-T4 and advice should be sought from an endocrinologist on how this can be safely done.

#### **Is there any problem switching my long established L-T3 patients to L-T4?**

A change in treatment can result in some instability in thyroid status which can actually cost more to address than continuing with L-T3. The patient should be made aware of this risk to their thyroid status before switching.

#### **What is the process for patients who have been advised to switch to L-T4 from combined L-T3 + L-T4 or from L-T3 only?**

This should be made gradually with the aim of avoiding under-replacement or over-replacement. The final L-T4 requirement is likely to be around 1.6mcg/kg. Any information about previous L-T4 dosage that achieved a normal serum TSH will be a

useful guide. Gradual reduction of L-T3 starting at the same time as introducing or increasing L-T4 may be a preferable alternative. Careful monitoring of the patient by an endocrinologist during the transition period is essential.

### **Can I prescribe L-T4 instead of L-T3 for patients diagnosed with thyroid cancer?**

If L-T3 has been prescribed for patients with thyroid cancer, in preparation for radioiodine ablation, iodine scanning, or stimulated thyroglobulin test, it is imperative that such treatment is not discontinued. Substituting L-T3 with L-T4 in this context is inappropriate and should be strongly discouraged.

### **Are there any particular patient types which merit extra caution?**

In patients over the age of 60, or of any age with known heart disease, additional care is required to avoid over-replacement and L-T4/L-T3 combination therapy or L-T3 only therapy is not recommended in pregnancy.

### **Is there a resource to which I can refer if patients wish to be started on L-T3?**

A BTA Executive Committee peer-reviewed Statement on the Management of Primary Hypothyroidism endorsed by the Society for Endocrinology, Royal College of Physicians, Association of Clinical Biochemistry and British Thyroid Foundation is available on our website [www.british-thyroid-association.org](http://www.british-thyroid-association.org) and published in Clinical Endocrinology in June 2016:

<http://onlinelibrary.wiley.com/doi/10.1111/cen.12824/abstract;jsessionid=464C3DD5347A54567AB00FF4B9D8C2A6.f04t03>

The BTA statement recommends L-T4 as the standard treatment for hypothyroidism. Treatment with combination L-T3 plus L-T4 should only be considered in exceptional cases and should be started and supervised by accredited endocrinologists.

**For further professional information on Thyroid treatment please visit**

[www.british-thyroid-association.org](http://www.british-thyroid-association.org)

**Patients should be referred for information and support to [www.btf-thyroid.co.uk](http://www.btf-thyroid.co.uk)**

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