NHS Dudley

The Dudley Group of Hospitals NHS
NHS Foundation Trust

Specialist details Name Tel:	Patient identifier

EFFECTIVE SHARE CARE AGREEMENT

For the specialist **use of LIOTHYRONINE** for patients registered with a Dudley GP.

The aim of an Effective Shared Care Agreement (ESCA) is to provide information to General Practitioners (GP's) about complex or high cost therapies that their patients may receive following specialist referral. An ESCA will only be written when it has been agreed that shared care is an appropriate option and will include a statement of Specialist and GP responsibilities.

Shared Care Guidelines will ensure that all GP's have sufficient information to enable them to undertake prescribing responsibility for specialist and other therapies.

This guidance is not intended to be prescriptive and may be amended according to the individual clinicians view and patient circumstances.

It is not the intention to insist that GP's prescribe this therapy and any doctor who does not wish to undertake the clinical and legal responsibility is not so obliged. If the GP decides not to agree on the shared care the GP is advised to inform the specialist in writing.

For the specialist **use of LIOTHYRONINE** for patients registered with a Dudley GP.

ESCA: For the treatment of thyroid disorders with liothyronine following specialist Consultant Endocrinologist assessment

AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines suggested ways in which the responsibilities for managing the treatment of thyroid disorders with liothyronine can be shared between the specialist (Consultant Endocrinologist) and General Practitioner (GP). GPs are invited and requested to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. **If the specialist asks the GP to prescribe this drug, if the GP does not wish to take part in the ESCA, then they should reply to this request as soon as practicable.**

Sharing of care assumes communication between the Specialist, GP and patient. The intention to share care is usually explained to the patient by the clinician initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients on Liothyronine should be under regular follow-up, which provides opportunities to discuss drug therapy.

The clinician who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

RESPONSIBILITIES and ROLES

	Specialist (Consultant Endocrinologist) responsibilities
1	Confirm the thyroid disorder diagnosis
2	Assess the patient and confirm treatment with liothyronine is indicated and necessary.
3	Discuss the potential benefits, treatment side effects, and possible drug interactions with the patient
4	Ask the GP whether he or she is willing to participate in shared care before initiating therapy so that appropriate follow on prescribing arrangements can made.
5	Do baseline monitoring e.g. TSH, TFT's
6	Initiate treatment and stabilise dose.
7	Review the patient's condition and monitor response to treatment at 3 months after initiation of treatment and to carry out any follow up monitoring. Record any adverse events
8	Review the need for continuing treatment after 12 months of therapy
9	Report adverse events to the CSM.
10	Ensure clear backup arrangements exist for GPs, for advice and support
11	Communicate promptly with the GP when treatment is changed.
12	Have a mechanism in place to receive rapid referral of a patient from the GP in the event of deteriorating clinical condition.
13	Advise GP on dosage adjustment and when and how to stop treatment.
14	Where a beneficial response to treatment has **not** been achieved, the specialist needs to ensure that treatment is stopped and that the patient is reviewed

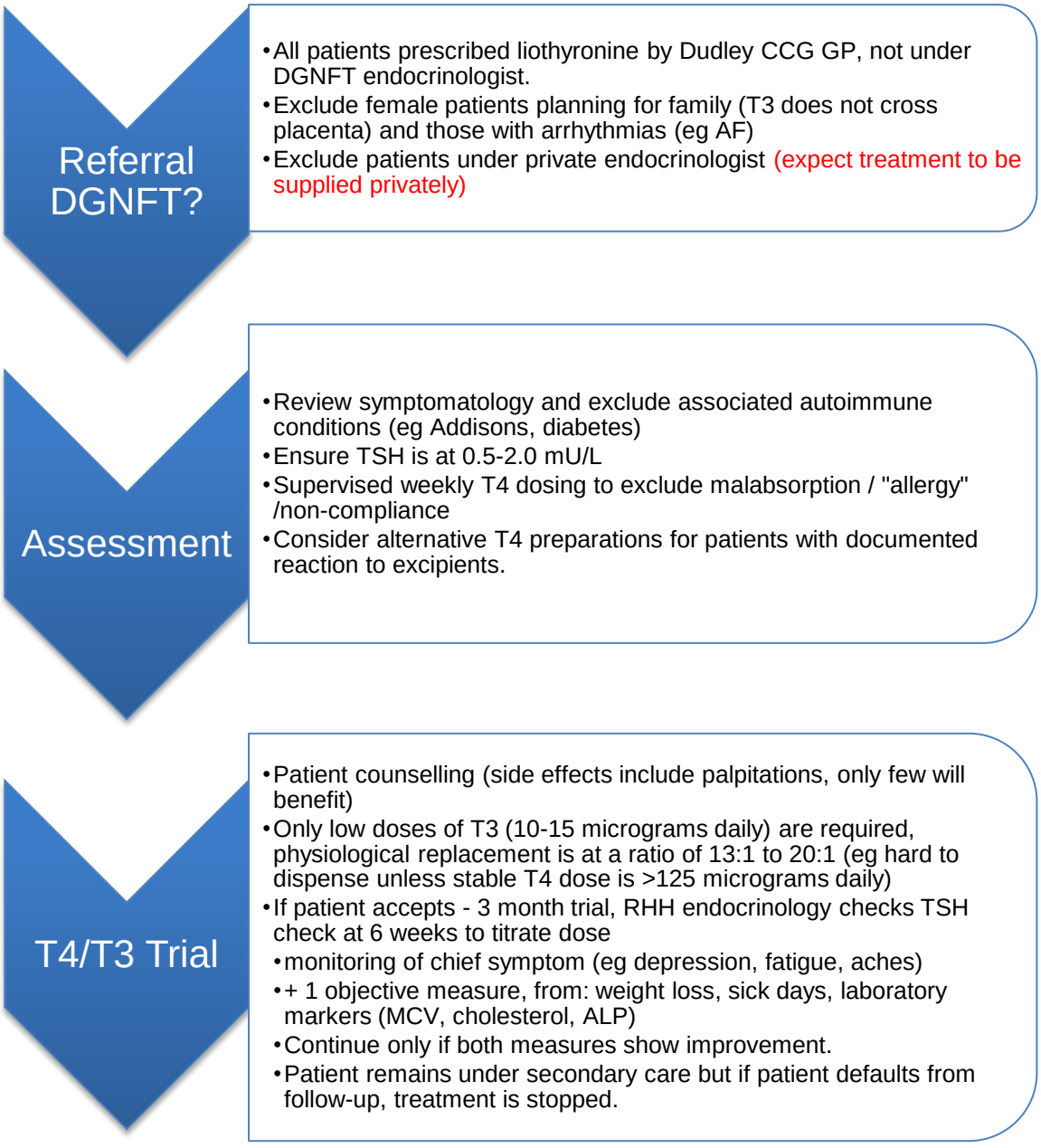
	General Practitioner responsibilities
1	Reply to the request for shared care as soon as practicable.
2	In the patient's notes, using the Read Code 8BM5.00 (shared care prescribing), denote that the patient is receiving treatment under a shared care agreement
3	Prescribe liothyronine at the dose recommended by the specialist (Consultant Endocrinologist)
4	Adjust the dose as advised by the Specialist (Consultant Endocrinologist)
5	Monitor patient as advised by the Specialist (Consultant Endocrinologist)
6	Report to and seek advice from the Specialist (Consultant Endocrinologist) on any aspect of patient care that is of concern and may affect treatment.
7	Refer patient to the Specialist (Consultant Endocrinologist) if his or her condition deteriorates
8	Stop treatment on the advice of the Specialist (Consultant Endocrinologist) or immediately if an urgent need to stop treatment arises.
9	Report adverse events to the specialist and CSM.
10	Liaise with the community pharmacist to ensure Liothyronine is procured cost effectively to the NHS.

Patient's role (or that of carer)	
1	Report to the Specialist (Consultant Endocrinologist) or GP if he or she does not have a clear understanding of the treatment.
2	Share any concerns in relation to treatment with the specialist or GP.
3	Report any adverse effects to the Specialist (Consultant Endocrinologist) or GP
4	Attend regular outpatient appointments with the Specialist

BACK-UP ADVICE AND SUPPORT

Contact details	Telephone No.	Bleep:	Fax:	Email address:
Consultant Endocrinologist:				
GP:				
Pharmaceutical Public Health Team	01384- 321979			Dudleymedman@nhs.net

Clinical pathway Dudley Group NHS Foundation Trust (DGNFT) for patients with hypothyroidism (post-radioiodine, autoimmune, congenital) wishing for combination T4/T3 treatment.



SUPPORTING INFORMATION (see SPC for Liothyronine for complete details available at https://www.medicines.org.uk/emc/medicine/24153)

Liothyronine Sodium BP 20micrograms Tablets

Therapeutic indications

- Liothyronine sodium tablets are qualitatively similar in biological action to thyroxine but the effect develops in a few hours lasting for 24 to 48 hours after stopping the treatment.
- Used for the treatment of coma of myxoedema, the management of severe chronic thyroid deficiency and hypothyroid states occurring in the treatment of thyrotoxicosis.
- Liothyronine sodium can be used also in the treatment of thyrotoxicosis as an adjunct to carbimazole to prevent sub-clinical hypothyroidism developing during treatment.
- Liothyronine sodium may be preferred for treating severe and acute hypothyroid states because of its rapid and more potent effect, but thyroxine sodium is normally the drug of choice for routine replacement therapy.

Posology and method of administration

Adults: Starting dose of 10 or 20 micrograms every 8 hours, increasing after one week, if necessary, to the usual recommended daily dose of 60 micrograms in two or three divided doses.

Myxoedema Coma: 60 micrograms given by stomach tube, then 20 micrograms every 8 hours. It is more usual to start treatment with intravenous liothyronine.

Adjunct to carbimazole treatment of thyrotoxicosis: 20 micrograms every 8 hours.

Elderly and Children Patients: 5 micrograms daily (Liothyronine sodium tablets can be crushed and triturated with lactose for administration as a powder).

Method of Administration: Oral

Contraindications

Hypersensitivity to any components of Liothyronine sodium tablets.
Patients with angina of effort or cardiovascular diseases and thyrotoxicosis.

Special warnings and precautions for use

- In severe and prolonged hypothyroidism, adrenocortical activity may be decreased. When thyroid replacement therapy is started, metabolism increases more than adrenocortical activity and this can lead to adrenocortical insufficiency requiring supplemental adrenocortical steroids.
- Liothyronine sodium treatment may result in an increase in insulin or anti-diabetic drug requirements. Care is required for patients with diabetes mellitus and diabetes insipidus.
- In myxoedema, care must be taken to avoid imposing excessive burden on cardiac muscle affected by prolonged severe thyroid depletion. Care is needed in the elderly.
- Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medication.
- Panhypopituitarism or predisposition to adrenal insufficiency (initiate corticosteroid therapy before starting liothyronine), pregnancy, breast-feeding(see section 4.6 Pregnancy and lactation).
- A baseline ECG is valuable with initial dosage because changes induced by hypothyroidism can be confused with ischaemia. If metabolism increases too rapidly (causing diarrhoea, nervousness, rapid pulse, insomnia, tremors and sometimes anginal pain where there is latent myocardial ischaemia), reduce dose or withhold for 1-2days and start again at a lower dose.

Interaction with other medicinal products and other forms of interaction

- Liothyronine sodium therapy may potentiate the action of anticoagulants. Phenytoin levels may be increased by liothyronine. Anticonvulsants, such as carbamazepine and phenytoin enhance the metabolism of thyroid hormones and may displace thyroid hormones from plasma proteins. Initiation or discontinuation of anticonvulsant therapy may alter liothyronine dose requirements.
- If co-administered with cardiac glycosides, adjustment of dosage of cardiac glycoside may be necessary. Colestyramine and colestipol given concurrently reduces gastrointestinal absorption of liothyronine.
- Liothyronine raises blood sugar levels and this may upset the stability of patients receiving antidiabetic agents.

- Liothyronine increases receptor sensitivity to catecholamines thus accelerating the response to tricyclic antidepressants. A number of drugs may affect thyroid function tests and this should be borne in mind when monitoring patients on liothyronine therapy.
- Co-administration of oral contraceptives may result in an increased dosage requirement of liothyronine sodium.
- Amiodarone may inhibit the de-iodination of thyroxine to triiodothyronine resulting in a decreased concentration of triiodothyronine with a rise in the concentration of inactive reverse triiodothyronine.
- As with other thyroid hormones, Liothyronine may enhance effects of amitriptyline and effects of imipramine.
- Metabolism of thyroid hormones accelerated by barbiturates and primidone (may increase requirements for thyroid hormones in hypothyroidism).
- Requirements for thyroid hormones in hypothyroidism may be increased by oestrogens.

Pregnancy and lactation

Pregnancy: Safety during pregnancy is not known. The risk of foetal congenital abnormalities should be weighed against the risk to the foetus of untreated maternal hypothyroidism.

Lactation: Liothyronine sodium is excreted into breast milk in low concentrations.
This may interfere with neonatal screening programmes.

Undesirable effects

The following effects are indicative of excessive dosage and usually disappear on reduction of dosage or withdrawal of treatment for a day or two. Anginal pain, cardiac arrhythmias, palpitations, muscle cramps, tachycardia, diarrhoea, restlessness, excitability, headache, flushing, sweating, excessive loss of weight and muscular weakness, vomiting, tremor, insomnia, fever, heat intolerance, transient hair loss in children, hypersensitivity reactions including rash, pruritus and oedema also reported.

I agree to participate in this shared care agreement for the treatment of the below named patient with Liothyronine

General Practitioner

Name (please print)_____Signature _____Date_____

Hospital Specialist/Consultant

Name (please print)_____Signature_____Date_____

Patient's name	Date of birth	Sex	Home Address	NHS Number

Dudley Group of Hospitals NHS Foundation Trust, NHS Dudley
Original: January 2018
Review date: January 2020