

Barns Medical Practice Service

Specification Outline: Hypothyroidism

DEVELOPED March 2015

REVIEW August 2019

Introduction

The thyroid is a gland in the neck which makes two thyroid hormones, thyroxine (T4) and tri-iodothyronine (T3). Thyroxine is inactive and is converted by the tissues and organs that need it into tri-iodothyronine. The role of thyroid hormones, put simply, is to regulate the metabolism of virtually all cells in the body. When there is too little thyroid hormone (hypothyroidism) the body's metabolism slows down and this is manifested by changes in various tissues within the body. The prevalence of hypothyroidism is about 2% and this is ten times more common in women. There are two main causes of hypothyroidism in the UK, namely autoimmunity and as a side effect of treatment for an overactive thyroid. In autoimmune thyroid diseases, the thyroid cells are destroyed by white blood cells (lymphocytes) which attack the thyroid. Together these two types of hypothyroidism account for well over 90% of all cases.

Rarer causes include inflammatory responses in the thyroid (sometimes as the result of viruses or drugs such as amiodarone or lithium), abnormal thyroid development in the foetus and genetic defects in thyroid function (leading to congenital hypothyroidism which should usually be picked up during neonatal screening). Iodine deficiency is still a common cause of hypothyroidism in some parts of the world but is very rarely encountered in the UK. All the types of hypothyroidism just mentioned are usually classified as *primary*, meaning that they result from direct impairment of the thyroid gland's function. Impaired thyroid function may also occur as a result of pituitary disease, because the pituitary manufactures TSH (thyroid stimulating hormone) which is the most important internal factor controlling thyroid function. If the pituitary is damaged and cannot make TSH, the thyroid stops working.

Diagnosis

Common complaints include fatigue and lethargy, cold sensitivity, dry skin and lifeless hair, impaired concentration and memory, increased weight with poor appetite and constipation. Patients may also fairly often experience a hoarse voice, tingling of the hands (carpal tunnel syndrome), heavy and, later, absent periods, deafness and joint aches. In childhood there may be delayed development and in the adolescent precocious puberty. The elderly may develop memory disturbance, an impaired mental state or depression, and in rare cases coma can occur, resulting in death if left untreated. Signs include slow movements, 'myxoedema faces' in which the face looks puffy due to the accumulation of subcutaneous fluid, cool dry skin, slow pulse rate, thinning of the hair including the eyebrows, slow tendon reflex relaxation time, slow pulse rate and hoarse voice. The thyroid may be enlarged (causing a goitre) in some patients due to accumulation of lymphocytes (Hashimoto's thyroiditis), but in others the thyroid is destroyed by the time of diagnosis and there is no goitre.

Nowadays patients often are diagnosed at an early stage of disease, due to increased awareness and improved biochemical testing. Therefore many patients have relatively few of the classical signs or symptoms just listed. In addition, none of the symptoms or signs is sufficiently sensitive or specific for the diagnosis of hypothyroidism, even when combined together.

Treatment

Levothyroxine is the current standard thyroid hormone replacement recommended in the British National Formulary (BNF). The aim of treatment should be to restore and maintain the TSH level within the reference range. Usually once started on treatment then it is lifelong therapy.

Regular Review

Most adults need between 50 and 150 micrograms of levothyroxine daily. A low dose is sometimes prescribed at first, especially in those aged over 60 or with heart problems, and is then gradually increased over a period of time. During titration blood tests are usually taken every 6 weeks, and the dose may be adjusted accordingly. The blood test measures Thyroid stimulating hormone (TSH) and the T4. Once the blood TSH level is normal it means you are taking the correct amount of levothyroxine. It is then common practice to check the TSH blood level once a year. The dose may need adjustment in the early stages of pregnancy. Also, as you get into late middle age and older, you may need a reduced dose of levothyroxine. Barns Medical Practice offers an annual review for people who have hypothyroidism once stabilised on treatment. The screening visit is carried out by the HCA and then the results are passed to a trained clinician who examines the results. (See appendix 1) Any suggested changes are usually discussed via a telephone consultation.

Resources for Staff and or Patients

Practice specific information see service specification

Internet information

<http://www.patient.co.uk/health/hypothyroidism-underactive-thyroid-leaflet>

<http://www.nhs.uk/conditions/Thyroid-under-active/Pages/Introduction.aspx>

http://www.thyroiduk.org.uk/tuk/about_the_thyroid/hypothyroidism.html

Staff involved and training required

HCA: blood sampling at diagnosis and annual review as per protocol once suitable training has been undertaken and this delegated person has undergone a period of supervised practice.

Independent prescribers: If trained in the management of hypothyroidism

Advertising of service to patients

Details of this service will be available on the practice website.

Patients will be advised of the service at the point of diagnosis.

REFERENCES

http://www.british-thyroid-association.org/info-for-patients/Docs/bta_patient_hypothyroidism.pdf

<http://www.acb.org.uk/docs/TFTguidelinefinal.pdf>

Protocol for Hypothyroidism Management by Health Care Assistants

DATE CREATED 2/02/2015

REVIEW DATE 2/02/2017

PURPOSE OF PROTOCOL

To enable suitably trained Health Care Assistants working for or on behalf of BARNS MEDICAL PRACTICE who have undertaken relevant training (as outlined below), to regularly review a patient's hypothyroidism as a duty delegated by the General Practitioner or a registered nurse. The results of the screening visit are then examined / assessed by a GP or nurse with a special interest in the condition and any changes to management will be communicated following the initial visit and often by telephone.

AIM

To monitor diagnosed hypothyroid patients

To report and act on changes in overall condition

To ensure no deterioration in condition

To offer continuing health promotion advice and prevent further complications

AUTHORITY TO PROCEED

In accordance with HCA code of conduct (Scottish Gov., 2009) and with the training and skills listed below.

TRAINING + SKILLS

- Completion of HCA induction training course on the management of hypothyroidism and its complications.
- Completion of period of supervised practice and completion of assessment of competence
- Training and competence in the correct procedure for onward referral or management of any concerning features on the day of review.

- Appropriate anatomy and physiology knowledge
- Access to and knowledge of relevant guidance/ protocols re. hypothyroid
- Demonstration of competence in relation to this delegated duty within the PDP and appraisal

ELIGIBILITY CRITERIA

INCLUSION/EXCLUSIONS

All patients who have hypothyroidism and have been stabilised on treatment and are attending for annual review or regular monitoring as invited by BARNES MEDICAL PRACTICE .

ADMINISTRATION PROTOCOL

1. Patients will be advised to attend annually. Computer search will be run after 12 months to ascertain those who have not been seen.
2. These patients will receive 3 letters to attend for review.

CLINIC PROTOCOL

1. A 10-minute appointment will be offered.
2. Consultation will be carried out in privacy of a consulting room.
3. Computerised notes will be made available.
4. The LTCRv Thyroid Disease Template will be completed annually.

Assessment

- Smoking status, refer to smoking cessation clinic if smoker
- Diet (weight, height, BMI), low fat diet
- Exercise
- Medications
- Alcohol consumption
- Discuss salt intake
- Offer lifestyle advice and record

Vital signs

- Blood pressure < 140/80

Blood monitoring

TFTs

Record Keeping

The Long Term Condition Review Template, within the Vision computerised record will be completed with regard to thyroid disease.

Audit

Health Care Assistants will be expected to participate in audit in relation to patient outcomes and the development of this role.

Management of Significant Event

Any significant event which occurs during a thyroid disease consultation must be reported to the Practice Manager / General Practitioner or the Registered Nurse / Manager and the incident reported via the Barns Medical Practice significant event document.

REFERENCES

http://www.thyroiduk.org.uk/tuk/about_the_thyroid/hypothyroidism_signs_symptoms.html

<http://www.endocrineweb.com/conditions/thyroid/hypothyroidism-too-little-thyroid-hormone>