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THYROIDECTOMY FOR BENIGN NODULAR DISEASE OF THE THYROID

Introduction

This sheet is intended to tell you about the thyroid gland and give you information about the operation of thyroidectomy. Your surgeon will explain to you the reason for recommending surgery as treatment for your thyroid gland. The surgeon will also discuss whether in your case it is planned to remove all of the thyroid or only part of it.

The Thyroid Gland

The thyroid gland produces a chemical substance (a hormone) called thyroxine. This hormone circulates around the body in the blood and controls the speed at which the body's chemical processes work. The normal thyroid has considerable spare capacity for making thyroxine, and so normally removal of as much as half of the gland can be undertaken without any need to give thyroxine replacement in the form of daily tablets after the operation. If however the whole thyroid has been removed you will need to take thyroxine for the rest of your life.

Very close to the thyroid glands are four tiny glands called parathyroid glands, each not much bigger than a grain of rice. These produce a hormone, which controls the level of calcium in your body. The parathyroid glands are normally left in place when the thyroid gland is operated upon but their function may be affected by the operation on the thyroid; there is more information about this later in this document.

Surgery

The operation requires a general anaesthetic and a stay in hospital, which is normally between 2 and 4 days. Access to the thyroid obviously requires that the surgeon make an incision in the neck. This is made a couple of finger breadths above the top of the breastbone. It is made in a skin crease or following the "grain" of the skin. This collar incision is symmetrical even if the thyroid abnormality is only on one side. Most thyroidectomy incisions heal to produce a very satisfactory scar. At the end of the operation the surgeon may consider it appropriate to leave a small "drain" tube in the neck. This will normally be removed on the first or second day after surgery. In some thyroid operations it is necessary to remove some of the lymph glands from the neck. The absence of these glands does not normally produce any problems; if your surgeon expects to remove lymph glands it will have been discussed with you.

Possible complications

Most thyroid operations are straightforward and associated with few problems. However all operations carry risks which include postoperative infections (e.g. in the wound or chest), bleeding in the wound and miscellaneous problems due to the anaesthesia, but these are very rare. Bleeding in the wound can be a serious problem if it occurs but the chance of a significant bleed needing you to return to the operating theatre within a day or two after your operation to clear out the blood is small (in the region of 1`in 50).

Scar:

The scar may become relatively thick and red for a few months after the operation before fading to a thin white line. Very rarely some patients develop a thick exaggerated scar but this is uncommon.

Voice Change:

It is impossible to operate on the neck without producing some change in the voice; fortunately this is not normally detectable. A specific problem related to thyroid surgery is injury to one or both of the Recurrent Laryngeal Nerves. These nerves pass close to the thyroid gland and control movement of the vocal cords. Injury to these nerves causes hoarseness and weakness of the voice. The nerve may not work properly after thyroid surgery due to bruising of the nerve but if this should occur, it recovers over a few weeks or months. Rarely, the nerve may be permanently injured and the nerve function will not recover. The External Laryngeal Nerve may also be injured and this results in a weakness in the voice although the sound of the voice is unchanged. Difficulty may be found in reaching the high notes when singing, the voice may tire more easily and the power of the shout reduced. Careful surgery reduces the risk of permanent accidental injury to a very low level but cannot absolutely eliminate it. Injury to both recurrent laryngeal nerves is extremely rare but is a serious problem and may require a tracheostomy (tube placed through the neck into the windpipe).

Low blood calcium levels:

Patients undergoing surgery to the thyroid gland are at risk of developing a low calcium level if the four tiny parathyroid glands which control the level of calcium in the blood stop working after the operation. It is normally possible to identify and preserve some if not all of these glands and so avoid a long-term problem. Unfortunately even when the glands have been found and kept they may not function. If this happens then you will require to take extra calcium and/or vitamin D on a permanent basis. The risk of you needing long term medication because of a low calcium level is small (about 1 in 50). It is quite common to require calcium and/or vitamin D tablets for a few weeks or months after the operation.

Thyroid function:

If it has been decided to remove all the thyroid gland then you will require lifelong replacement of thyroxine. Fortunately this is a straightforward once a day regimen with little requirement for adjusting dosage. There is a prescription charge exemption for patients requiring thyroxine tablets so you will not have to pay for these (or any other tablets as the law currently stands). If most, but not all, of the thyroid gland is removed then in the early weeks after the operation the remaining thyroid may not produce enough thyroxine and you may require replacement tablets temporarily until the retained thyroid produces enough hormone itself. This will be monitored.

Swallowing difficulty:

Usually swallowing is improved following thyroid surgery, especially for large goitres or those which have extended down into the chest, but occasionally some mild difficulty may develop or be persistent. Similarly, if you are experiencing any difficulty with your breathing before the operation, then this may also be eased.

We wish to emphasise that these potential side effects and complications are unusual, but we believe it is essential to tell you about these rather than have you develop a complication without having been forewarned. If you are unclear about the topics in this sheet or if you are unclear about any other details of your operation please ask one of the surgical team.

I confirm that I have read the above and have discussed any queries with the surgical team.

Name .....
Signature .....
Date .....

Note: If you search the Internet for information on this subject you should remember that some sites will describe calcium levels using different units of measurement. Additionally many sites are in effect advertising for patients and may propose untried or non standard procedures and treatments, so beware and discuss what you read with your doctors.