
PATIENT INFORMATION · PROCEDURE 05

Thyroid Surgery (Thyroidectomy)

Hemi- and total thyroidectomy for nodules, goitre and cancer.

The thyroid gland sits at the base of the neck and controls metabolism. It can develop nodules, grow into a goitre, become overactive, or — less commonly — develop cancer. Surgery removes part or all of the gland when indicated.

What it involves

Dr Marais performs both hemithyroidectomy (one lobe) and total thyroidectomy through a small horizontal incision in a natural neck skin crease. Intra-operative nerve monitoring protects the vocal cord nerves; the parathyroid glands are carefully preserved.

Thyroid nodules are extremely common — up to half of adults have them on ultrasound — and most are benign. The workup is standardised: a proper ultrasound to characterise the nodule (TI-RADS score), thyroid function blood tests, and a fine-needle aspiration biopsy if the ultrasound features are suspicious.

Hemithyroidectomy removes one lobe and is enough for a benign but growing nodule, an indeterminate biopsy, or small localised cancers. Total thyroidectomy removes the whole gland and is used for confirmed cancer, Graves' disease, or a large symptomatic goitre.

The two structures most at risk during thyroid surgery are the recurrent laryngeal nerves (which move the vocal cords) and the parathyroid glands (which control calcium). Intra-operative nerve monitoring and meticulous preservation of the parathyroid blood supply are central to a good outcome.

When it's indicated

Nodules that are suspicious on ultrasound or biopsy, goitres that are large or symptomatic, Graves' disease unresponsive to medication, and confirmed or suspected thyroid cancer.

The approach

Endocrine surgery is a special interest. Nerve preservation, calcium balance and cosmetic outcome are non-negotiable — the scar sits in a natural line and fades to be almost invisible.

Recovery

One or two nights in hospital. A small drain is sometimes left overnight. Voice can feel a little tired for one to two weeks. If total thyroidectomy is done, you start lifelong thyroxine (a single tablet each morning) immediately — most patients feel normal within weeks once the dose is right.

Common questions

Will I have a visible scar?

The incision sits in a natural neck skin crease and is typically 4–6 cm. Most patients find it settles to a fine pale line within a year and becomes hard to see.

Will I need thyroid hormone tablets afterwards?

Only if the whole gland is removed. After a hemithyroidectomy, the remaining lobe usually produces enough hormone for you — around 80% of patients need no tablets at all.

What are the risks?

The main risks are voice change (usually temporary, permanent in under 1% with intra-operative nerve monitoring), low calcium after total thyroidectomy (usually temporary), bleeding, and infection. Dr Marais discusses each in detail.

How is thyroid cancer treated?

Most thyroid cancers have an excellent prognosis and are treated with total thyroidectomy, sometimes followed by radioactive iodine. Papillary and follicular cancers — the two commonest types — have five-year survival above 95% when treated appropriately.

Do I need surgery for every thyroid nodule?

No — most nodules are benign and can simply be watched with periodic ultrasound. Surgery is reserved for suspicious biopsies, cancer, functional problems, or nodules causing symptoms.

This brochure is general information about a surgical procedure and does not replace a consultation. Every patient's circumstances are different — please discuss your specific case with Dr Marais before deciding on treatment.