PATIENT INFORMATION · PROCEDURE 06

Parathyroid Surgery (Parathyroidectomy)

Focused parathyroidectomy for hyperparathyroidism.

The four parathyroid glands sit behind the thyroid and regulate calcium. When one becomes overactive (usually because of a benign adenoma), calcium levels rise — causing fatigue, kidney stones, bone loss, and low mood.

What it involves

Dr Marais performs targeted parathyroidectomy: pre-operative sestamibi and ultrasound localise the abnormal gland so that a small incision is enough to remove it. Intra-operative PTH measurement confirms cure before you leave theatre.

Primary hyperparathyroidism is under-recognised. The classical textbook description — bones, stones, groans and psychiatric moans — hides the fact that most patients simply feel tired, foggy, and unwell for years before a routine blood test catches an elevated calcium.

The diagnosis is biochemical: raised calcium and raised (or inappropriately non-suppressed) PTH. Once confirmed, imaging locates the culprit gland. In roughly 85% of cases one gland (an adenoma) is responsible; in 15% multiple glands are affected.

Focused parathyroidectomy uses a 2–3 cm incision directly over the abnormal gland identified by pre-op imaging. Intra-operative PTH measurement — taken before and 10 minutes after removal — confirms cure in theatre: a fall of over 50% into the normal range means the biochemistry is fixed.

When it's indicated

Confirmed primary hyperparathyroidism (persistently elevated calcium with elevated PTH), symptomatic hypercalcaemia, kidney stones, or unexplained bone loss.

The approach

This is one of the most rewarding operations in surgery: a single hour of work can resolve years of symptoms. It requires precise pre-op imaging and calm operating — both of which are core to the practice.

Recovery

Same-day or one-night stay. The scar is small and heals to a fine line. Most patients notice mental clarity and energy returning within weeks. Bone density recovers gradually over a year or two, particularly at the spine.

Common questions

Is high calcium always caused by a parathyroid problem?

No — cancer, medications (especially thiazide diuretics), and vitamin D toxicity can all raise calcium. The blood test that distinguishes is PTH: raised with high calcium points to a parathyroid cause.

Will I need lifelong medication after surgery?

No. Once the abnormal gland is removed and biochemistry normalises, the remaining glands take over. Some patients need short-term calcium supplementation as the bones re-mineralise.

What if the imaging can't find the abnormal gland?

About 15% of scans are inconclusive. In that case, Dr Marais performs a four-gland exploration through a slightly larger incision — still through the same natural skin crease — and identifies the abnormal gland at surgery.

Can medication treat hyperparathyroidism instead?

Cinacalcet lowers calcium but doesn't cure the underlying problem, is expensive, and doesn't reverse bone loss. Surgery is definitive and curative for eligible patients.

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.