PROFESSOR
Nathan Lawrentschuk
MBBS FRACS FUSANZ PhD
UROLOGIST UROLOGIC ONCOLOGIST ROBOTIC SURGEON

Suite 118, 1st Floor, 55 Flemington Road, North Melbourne
www.nathanlawrentschuk.com.au
info@nathanlawrentschuk.com.au
(03) 9329 1197

Radical Orchidectomy

A **radical orchidectomy** is typically carried out to treat a testicular mass that is suspected to be cancerous. In some cases, it may also be performed to manage severe infection or long-standing pain in the testicle that has not responded to other treatments.

What does the procedure involve?

The operation is conducted in hospital under **general anaesthesia**.

- A 10–12 cm incision is made in the groin to access and remove the testicle and spermatic cord.
- If you are having a testicular prosthesis inserted, it is placed in the scrotum via the same incision.
- The wound is closed using dissolvable stitches.

The procedure is most commonly done as day surgery, meaning you can usually go home the same day with a responsible adult. Occasionally, an overnight hospital stay is required.

Will this affect my fertility and hormone levels?

The testicles are responsible for producing sperm and the male hormone testosterone.

Fertility

- If your remaining testicle is healthy, it will continue producing sperm.
- However, if you only have one testicle, or the remaining one is impaired, or if you require further cancer treatment (e.g. chemotherapy), your sperm production may decline or stop.
- Sperm banking (freezing a semen sample) before or shortly after surgery is available and can preserve fertility options for the future. Prof Lawrentschuk can arrange referral to a fertility clinic.

Hormone production

- If the remaining testicle is functioning, it will continue producing testosterone.
- If not, testosterone levels may fall, which can lead to low energy, reduced libido, erectile dysfunction, mood changes, and changes in muscle or fat distribution.
- In such cases, testosterone can be replaced with hormone therapy (“testosterone replacement therapy”).

Before surgery

You will be contacted 1-2 weeks prior to your scheduled procedure with your fasting and admission and time. You will also receive a link to complete your online admission forms.

It is important for you to advise the rooms if you are taking any **blood thinners** or any prescribed medications for **diabetes or weight loss purposes.**

Following surgery

Recovery at home

You will be discharged on the same day as your procedure. Please keep in mind that you must not drive for at least 24 hours after a general anaesthetic. You should only resume driving when you are alert, pain-free, and able to do so safely. Some discomfort, swelling or bruising is normal. Please note the following:

- **Rest** is recommended for **1–2 days following surgery**.
- **Sedentary activity** can generally be resumed after **5 days**.
- **Avoid strenuous activity** or heavy lifting for about **4 weeks**.
- **Driving** can typically resume after **5 days**.

Possible complications

Common (1 in 2 to 1 in 10):

- **Temporary bruising** or swelling of the scrotum
- **Numbness** near the incision or at the base of the penis (usually improves over time, though rarely permanent)
- **Cancer may not be cured** by surgery alone

Occasional (1 in 10 to 1 in 50):

- **Infection** requiring antibiotics or further intervention

Rare (1 in 50 to 1 in 250):

- **Bleeding** requiring further treatment
- **Chronic groin pain** due to nerve involvement
- The **mass** may turn out **not to be cancerous**

Will I need additional treatment?

After surgery, the removed **testicle** and **spermatic cord** are **sent to pathology** to confirm the presence and type of cancer.

- Results are combined with imaging (CT scan) and blood tests (tumour markers) to determine whether further treatment is needed.
- Often, orchidectomy alone is curative. If so, no additional treatment is needed, but ongoing monitoring with scans and blood tests is required.
- If the cancer has already spread or returns later, chemotherapy is usually recommended.

Even when cancer has spread, there is still a high chance of cure with a combination of surgery and chemotherapy. Prof Lawrentschuk may refer you to a **medical oncologist** (cancer specialist) for additional guidance.

When to seek help

Please contact **Professor Lawrentschuk's rooms** at (03) 9329 1197 or attend your nearest **Emergency Department** if you experience:

- Develop a **fever** or severe pain.
- Have problems urinating or are **unable to urinate**.
- **Lose sensation** in your scrotum.
- See **blood or pus** coming from the **incision**.

Alternative treatment options

Radical orchidectomy is the most common approach to treating a testicular mass, as most such masses are cancerous.

- A biopsy is not usually performed beforehand due to the risk of cancer spreading.
- In some rare cases, **partial orchidectomy** (removing only the mass) may be performed, though this carries a higher recurrence risk.
- In select situations, such as very small masses that appear non-cancerous, **careful monitoring (surveillance)** may be recommended.

Follow-up and monitoring

A follow-up appointment will be scheduled **6-8 weeks** post-surgery to:

- Review your recovery
- Discuss histopathology results of the removed tissue

Pathology results are typically available within 10–14 days. In some cases, your results may be reviewed in a **multidisciplinary team meeting** to determine the most effective next steps. If this occurs, you will be notified and kept informed of the team's recommendations.