Robotic adrenalectomy

Who is suitable for robotic-assisted adrenalectomy?

Robotic-assisted adrenalectomy may be an option for patients with:

- A benign adrenal tumour which is producing abnormal levels of hormones
- A cancerous adrenal tumour

What are the advantages of robotic-assisted adrenalectomy?.

Robotic-assisted adrenalectomy offers both the surgeon and the patient various benefits when compared to conventional laparoscopic or open surgery. The entire operation can be performed with a minimally invasive approach without the need to make a large incision.

The potential benefits of robotic surgery include:

- Smaller incisions
- Less blood loss
- A shorter hospital stay and faster recovery time
- Greatly enhanced, high definition 3D vision inside the body
- Small and precise instruments that allow a greater range of movements than the human hand

How is a robotic-assisted adrenalectomy performed?

- The patient is placed under general anaesthetic for the duration of the procedure, which lasts around 3 hours
- Between 3-5 small keyhole incisions are made in the abdomen, through which the surgical instruments and camera are inserted
- Carbon dioxide is used to inflate the patient's abdomen, creating

- space required for the surgeon to view and access the affected adrenal gland
- The affected adrenal gland is located and carefully dissected free from the kidney and other surrounding structures
- Special care is taken to avoid damaging the kidney or major blood vessels nearby
 - The adrenal gland is removed though a small incision
- Carbon dioxide is released and the robotic instruments are removed
- Incisions are sealed carefully, to reduce the chance of hernia or scarring

What to expect after a robotic-assisted adrenalectomy?

- You will remain in hospital for 2-3 nights following your procedure
- A specialist medical physician or endocrinologist may be involved in your care
- There will be some mild pain or discomfort which can be managed with medication
- You will be encouraged to sit out of bed and walk around, as well as perform deep-breathing exercises to minimize the chance of pneumonia or blood clots in the legs or lungs (DVT/PE)
- Uncommon complications include:
 - Damage to major blood vessels or other organs during surgery
 - Incisional hernia (usually where there are problems with wound healing)

Procedure outcomes

Most patients are able to return to their normal activities within 2-3 weeks following a robotic-assisted adrenalectomy. Strenuous activities and heavy lifting should be avoided for 6 weeks following surgery to minimize the chance of bleeding or hernia.

The body can function completely normally with a single adrenal gland after one is removed.