



## Procedure Information Sheet

### Introduction

The Adrenal gland is a gland situated above the kidney. It secretes various hormones to regulate the body metabolism on salt regulation, stress response and blood pressure.

### Indication

Hormonal imbalance, malignancy

### The Operation / Procedure

This will be done under general anaesthesia, incision can go through peritoneal cavity or retroperitoneal. Minimal invasive surgery is feasible in some situation.

### Before the Operation / Procedure

1. Discuss with doctor in charge about the operation management, nature of operation and possible risks. Read through and understood this information sheet and complete the consent form.
2. Patient may need physical check-up or examination such as blood tests, urine tests, chest x-ray, electrocardiogram, or CT scan etc.
3. Patient may need endocrine check up or examination.
4. Pre-operative anesthetic assessment about the anesthetic management, nature of anesthetic and possible risks and complete the anesthetic consent form.
5. Follow doctor's advice for pre-medication and potassium replacement and anti-hypertensive agent.
6. You need to have shower and a hair wash.
7. Keep fast for 6 - 8 hours before operation to avoid risk of aspiration.
8. Follow doctor's advice for pre-medication.
9. Take off underwear and change to operation gown, socks and cap, remove denture, contact lens and jewellery (including hair pins, ear rings and ring etc.).
10. Empty bladder before transfer to Operating Theater.

### After the Operation / Procedure

1. For patient with pheochromocytoma post operative intensive care unit admission may be required.
2. Bed rest and close monitoring after operation.
3. Patient may have mild throat discomfort. Please use your hand to tap the abdomen before coughing.
4. The patient may need a nasogastric tube and/ or a urinary catheter.
5. Patient will experience certain degree of wound pain, please inform nurses for prescribed oral or intravenous analgesics if required.
6. Wound is covered by sterile dressing, keep wound dressing dry, abdominal drain may be placed for removal of excessive body fluid, they are usually removed in several days time depending on the content and volume of fluid drained.
7. Mild discomfort or pain over shoulder or neck is common because of gas insufflation during the surgery.
8. Patient will be kept fast immediately after surgery and given intravenous fluid. Diet is gradually resumed (fluid, soft and normal diet) when bowel function returns.
9. The day after surgery, minor activities are allowed and deep breathing exercise are encouraged excessive body movement should be avoided which can dislodge the catheters.
10. There is no need to restrict diet after discharge, drink more water, try frequent small meals to alleviate some common symptoms such as loss of appetite, bloating, indigestion and other gastrointestinal problems.
11. Follow doctor's advice for anti-hypertensive agent or steroid replacement after the operation.
12. Mild wound pain is common; please take prescribed analgesic for pain relief.
13. Taking shower is allowed, but remember to keep dressing dry till follow up.
14. Please attend follow-up at specifies date and time.

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| <b>Patient's Label</b> |
| Patient Name: _____    |
| Hospital No: _____     |
| Episode No: _____      |



**Risk and Complication**

- 1. Complication related to general anaesthesia
  - 1.1 Cardiovascular: myocardial infarction, angina, stroke, deep vein thrombosis, pulmonary embolism
  - 1.2 Respiratory: atelectasis, pneumonia, exacerbation of asthma or chronic obstructive airway disease
  - 1.3 Allergic reaction
- 2. Operation related
  - 2.1 Hemorrhage during or after surgery(<1%)
  - 2.2 Infection (<1%)
  - 2.3 Intra-abdominal organ injury: duodenum, pancreas, spleen(rare)
  - 2.4 High blood pressure (in Phaeochromocytoma) leading to stroke
  - 2.5 Acute circulatory failure
  - 2.6 Salt deficiency
  - 2.7 Recurrence (Biochemical or clinical for secreting tumor)
  - 2.8 Metastasis (for malignant tumor)
  - 2.9 Need for long term steroid replacement if bilateral resection is to be performed

**Disclaimer**

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

**Reference**

Nwariaki, F., Carty, S. E., & Chen, W. (2019) Adrenalectomy techniques. UpToDate. Retrieved on 8/6/2020 from <https://www.uptodate.com/contents/adrenalectomy-techniques#!>

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| Patient Name: _____    |
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Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_