

# Procedure Information Sheet – Anterior Decompression and/ or Spinal Fusion

Hosp No.	:	HKID No.:
Case No.	:	
Name		

DOB : M / F Adm Date :

### 1. Introduction

- 1.1. This is a major operation to decompress the spinal cord or nerve roots.
- 1.2. This procedure can be performed at different levels in the spine (cervical/ thoracic or lumbar).
- 1.3. Operated in different levels would come with particular risks and complication respectively.
- 1.4. Fusion may be done at the same time if there are pre-existing spinal instability, deformity or destabilization after decompression.

Contact No.:

- 1.5. Internal fixation device may be used to provide immediate spinal stability and enhance fusion.
- 1.6. The operations are usually done in anterior approach.

### 2. Procedural Preparation

- 2.1. Tests may be ordered including X-Ray or Magnetic Resonance Imaging (MRI) of spine, blood tests, Chest X-Ray, Electrocardiogram (ECG) and motor and sensory chart.
- 2.2. The reason of operation, procedure and possible complications will be explained by the surgeon and consent form will be signed before operation.
- 2.3. Pre-operative anesthetic assessment will be performed. The anesthetic management and its possible risks will be explained by the anesthetist with consent for anesthesia signed.
- 2.4. Inform doctor for any drug allergy, regular medications or other medical conditions.
- 2.5. Do not eat or drink for 6 to 8 hours before operation if under general anesthesia.
- 2.6. Arrange customized external supportive device for spine immobilization after surgery, e.g. neck collar, lumbar corset.
- 2.7. Cleaning and shaving of hair may be need for cervical surgery.
- 2.8. You may be prescribed antibiotics as prophylaxis.

#### 3. Procedure

- 3.1. This procedure will be performed under general or spinal anaesthesia.
- 3.2. The skin incision is on one side in the front of the body to approach the spine.
- 3.3. A piece of bone from the ilium, fibula or a rib will be harvested to fill the defect at the spinal column (in special conditions synthetic material or allograft may be used).
- 3.4. Internal fixation devices such as plates and screws may be used if necessary.

#### 4. Recovery Phase

- 4.1. Patient will be closely monitored until fully awake in recovery room.
- 4.2. The first day after surgery usually keep fasting and continue intravenous infusion.
- 4.3. Wound pain can be minimized by taking and injecting analgesic. Patient Controlled Analgesia (PCA) will be considered if indicated.
- 4.4. Keep wound clean and dry.
- 4.5. Drainage tube from the wound, if any, will be removed once drainage is minimal.
- 4.6. Chest drain may be inserted when it is performed in thoracic level. It will be removed once drainage is minimal.
- 4.7. Passing stool and urine will be arranged in bed in the lying position. Sometimes a urinary catheter is used for monitoring and convenience. Usually it will be removed in a few days.
- 4.8. Lower limb exercise is encouraged to reduce the risk of deep vein thrombosis.
- 4.9. Neck collar or corset should be worn for protection when mobilize.
- 4.10. Turning of body is usually allowed within few days after surgery and this will not affect the wound healing.
- 4.11. Patient usually can start working exercise with the help of physiotherapist after the surgery.



GORT-F05E-R2-02/25 Page 1 of 3

Hosp No. : HKID No.:

Case No. Name

DOB: M/F

Adm Date : Contact No.:



## Procedure Information Sheet – Anterior Decompression and/ or Spinal Fusion

#### 5. General Possible Risks and Complications

- 5.1. There are complications that relate to surgery in general. These include the risks associated with anesthesia, infection, damage to nerves and blood vessels, and bleeding or blood clots.
- 5.2. This operation is generally very effective and is rarely associated with major complications like massive bleeding, neurological deterioration. The most serious neurological complication is complete tetraplegia, paraplegia or cauda equine syndrome depending on the location of the operation. Patients may lose the ability to breathe if the complication occurs in the upper cervical spine. The motor, sensory, autonomic, urinary, bowel and sexual function may be affected.

#### 6. Risks Specific to Operative Site

- 6.1. Cervical spine surgery:
  - 6.1.1. Haematoma at surgical site causing compression of trachea, which may cause breathing difficulty or even suffocation.
  - 6.1.2. Injury to the esophagus causing swallowing difficulty or even leakage of food into the mediastinum causing mediastinitis.
  - 6.1.3. Injury to the major neck artery or vein causing stroke.
  - 6.1.4. Injury to the thyroid gland causing thyroid hormone dysfunction.
  - 6.1.5. Injury to the nerve supplying the vocal cord causing hoarseness of voice.
  - 6.1.6. Injury to the cervical spinal cord or nerves causing neurological damage, in extreme case may lead to tetraplegia, double incontinence and breathing difficulty.
- 6.2. Thoracic spine surgery:
  - 6.2.1. Injury to the esophagus causing swallowing difficulty or even leakage of food into the mediastinum causing mediastinitis.
  - 6.2.2. Injury to the lung causing pneumonia or persistent pneumothorax.
  - 6.2.3. Injury to the aorta or vena cava causing torrential bleeding.
  - 6.2.4. Injury to lymphatic vessels causing chylothorax.
  - 6.2.5. Injury to the thoracic spinal cord or nerves causing neurological damage, in
  - 6.2.6. extreme case may lead to paraplegia, double incontinence and breathing difficulty.
- 6.3. Lumbosacral spine surgery:
  - 6.3.1. Reflex slowing of bowel movement causing abdominal distension and vomiting.
  - 6.3.2. Injury to the aorta or vena cava causing torrential bleeding.
  - 6.3.3. Injury to the abdominal structures, e.g. ureter, kidney, liver, bowel.
  - 6.3.4. Injury to the sympathetic nerves causing dryness and increase in temperature of the involved lower limb. It may also cause erectile dysfunction and retrograde ejaculation in men.
  - 6.3.5. Injury to the spinal nerves causing neurological damage, in extreme case may lead to paraplegia, double incontinence.

#### 7. Remark

7.1. The above-mentioned procedural information is not exhaustive, other unforeseen complications may occur in special patient groups or individual differently. Please contact your physician for further enquiry.

#### 8. References

8.1. Hospital Authority. Smart Patient Website: Anterior Decompression and/ or spinal fusion.



Page 2 of 3 GORT-F05E-R2-02/25



# Procedure Information Sheet – Anterior Decompression and/ or Spinal Fusion

Hosp No.	:	HKID No.:	
Case No.	:		
Name	:		
DOB	:	M/F	
Adm Date	:		

I acknowledged the above information concerning the operation or procedure. I have also been given the opportunity to ask questions and received adequate explanations concerning the condition and treatment plan.

Contact No.:

Patient/ Relative Signature:	
-	
Patient/ Relative Name:	
Date:	



GORT-F05E-R2-02/25 Page 3 of 3