

Introduction

- **W**ash hands, **I**ntroduce self, ask **P**atient's name & DOB & what they like to be called, **E**xplain and get consent
- Confirm the operation they are having
- Ask about what they know so far
- Try to find out any concerns they have or anything in specific they want to know

Before the operation

- Pre-operative **assessment**
 - Aims to assess medical fitness for an operation/anaesthetic
 - Will involve a history and physical examination
 - You will be told which medication to stop and when during this consultation
- Pre-operative **investigations**
 - May include: blood tests, chest x-ray, ECG, echocardiography, cardiopulmonary exercise testing
- There may be **special pre-operative measures**, which you will be told about if they apply e.g. bowel prep
- **Admission** on the morning of or evening before surgery
- **Consent** will be taken by a surgeon prior to theatre
 - The surgeon will discuss the procedure, the risks and benefits
 - A consent form will need to be signed (but you can change your mind anytime)
 - You will not be pressured
- You will be told about **fasting** (when to stop eating and drinking)
 - Usually '2-6 rule' = NBM for 2 hours pre-op; clear fluids only for 6 hours pre-op
- If the operation is on a limb, then the correct side will be **marked** with a black arrow

NB: see other notes on pre-operative assessment for a more comprehensive summary.

During the operation

- You will be taken to the anaesthetic room by a theatre nurse
- Your relatives may stay with you until this point
- You will then meet the anaesthetist who will put in a cannula to give you medication to relax you and an **anaesthetic**
- If you have a general anaesthetic, you will be asleep so the anaesthetist will need to put an **intubation** tube through your mouth so that breathing can be controlled in the operation. You will not remember this but you may have a sore throat afterwards. It will be taken out when you are waking up.
- The **operation** will then be performed – offer details about the specific operation

Types of anaesthetic		
Type	Detail	Examples where it may be used
General	Medication that is inhaled or injected to induce a reversible loss of consciousness	Many operations
Spinal	Needle is inserted into the lower back and a local anaesthetic is injected into the cerebrospinal fluid (the fluid in the subarachnoid space that surrounds the spinal cord) to numb the lower body	Operations below the umbilicus e.g. lower limb surgery, pelvic surgery, C-section/childbirth
Epidural	Needle is inserted into the back and a local anaesthetic is injected into the epidural space (the outermost part of the spinal cord) to numb the lower body	
Nerve block	Local anaesthetic injected around the nerve/s that supplies the area being operated on	Procedures on hands, arms, feet, legs or face
Local	Local anaesthetic injected directly into the area that is being operated on	Minor procedures on small areas

After the operation

- When you wake up you will be in the recovery area
- There may be **tubes** that were inserted in the theatre e.g. catheter, drains
- **Pain control** – there are a variety of options that may be used...
 - Intravenous (patient controlled analgesia) – you will be given a button that you can push whenever you want painkiller
 - Oral
 - Local wound catheters – local anaesthetic may be directly injected into a wound catheter
- Depending on the type of surgery, there may be limitations on what you are allowed to eat and drink for a period afterwards
- **VTE prophylaxis** – you will usually be given a small injection in the tummy skin each day to prevent blood clots and may be asked to wear compression stockings
- **Physiotherapy** – you will be seen by physiotherapists to build up your mobility after the operation
- **Occupational therapy** – if required, you may be assessed by therapists who will help arrange any care or modify your house to help you cope if required after the operation

Risks/complications

These must be explained using lay terms. Try not to scare the patient. Explain most complications are rare and how the risk of complications is minimised.

Generic

- Anaesthetic complications (e.g. arrhythmias, hypo/hypertension, hyperthermia, breathing problems, MI/stroke, allergy, teeth/lip/tongue damage, saw throat)
- Bleeding/haematoma
- Damage to nearby structures/organs
- Infections: local (wound/surgical site) or systemic (chest/UTI/sepsis)
- Venous thromboembolism (DVT/PE)
- Pain
- Fluid collections

Operation-specific

Operation	Specific complications
General surgery	
Gastrectomy	Dumping syndrome Malabsorption Peptic ulcers/gastric cancer Blind loop syndrome Abdominal fullness
Small and large bowel operations	Ileus Anastomotic leaks Stoma retraction Intra-abdominal collections Pre-sacral plexus damage Adhesions/intestinal obstruction Damage to other local structures e.g. kidneys
Cholecystectomy	Common bile duct injury/bile leak
Biliary	Common bile duct injury/bile leak Common bile duct stricture Anastomotic leak Bleeding into biliary tree (jaundice) Pancreatitis
Cardiothoracic	
CABG/stenting	Reperfusion arrhythmias Post-operative acute coronary syndrome Often need inotropes post operatively that may reduce organ perfusion elsewhere
Vascular	
Grafts/stents/bypass procedures	Failure of graft, haemorrhage/haematoma, infection, re-thrombosis, limb or organ ischaemia Arteriovenous fistula Cholesterol embolism (e.g. trash foot) Arteriopathies are at high risk of: acute coronary syndrome, stroke, PE Contrast complications e.g. anaphylaxis, renal injury
Endocrine	
Thyroidectomy	Airway obstruction secondary to haemorrhage – requires urgent opening of thyroidectomy wound Hypocalcaemia (damage to parathyroid glands) Recurrent laryngeal nerve damage
Parotidectomy	Facial nerve damage
Trauma and Orthopaedic	
Any orthopaedic operation	Infection of prosthesis Loss of position/failure of fixation Neurovascular injury Compartment syndrome
Total hip arthroplasty	Sciatic nerve damage
Urology	
Cystoscopy/transurethral resection of the prostate	High risk of UTI TURP syndrome (hyponatraemia) Impotence/retrograde ejaculation External sphincter damage (incontinence) Urethral stricture
Other	
Endovascular surgery	Retroperitoneal haemorrhage
Lymph node dissection (e.g. axillary nodes in breast cancer surgery)	Lymphoedema
Neck dissection (e.g. branchial cyst excision)	Cranial nerve damage (11, 12)