

CLINICAL SKILLS: PRE-OPERATIVE DISCUSSION AND ASSESSMENT

Definitions:

- A pre-operative discussion takes place before a patient has their surgery. It is usually completed by a member of the surgical team in order to discuss the procedure itself (including its benefits and risks) and ensure the patient is comfortable with having it. It is also an opportunity for the patient to ask questions if they need to.
- A pre-operative assessment is usually completed by the anaesthetist just before surgery. It ensures the patient is fit for the surgery he/she has agreed to have.

Preoperative discussion:

- Wash your hands, introduce yourself, and ask permission to discuss the surgery
- Ask patient what they know about the surgery they are having
- Ask if they have any concerns they want to address before discussing the surgery
- Ensure it is the right surgery they are having!
- Check their symptoms are still the same and in the same location as in the notes
- Provide information about what will happen during the surgery, how long it will take, it's risks and benefits, it's possible complications, and the expected outcome
- See below for complications associated with surgery
- Provide patient with written and verbal information
- They should give signed consent for the operation. There is a consent form for different procedures that take place in a hospital. You should familiarise yourself with these, as you may be asked to complete the form with a patient in your OSCE.

Complications of surgery:

- You may be asked to list the complications of a certain type of surgery – either to a patient (for example when consenting them for a procedure) or to the examiner. You should split the complications into **general complications** (those that could happen in any surgery) and **specific complications** for the surgery you are discussing
- General:
 - Infection
 - Wound site
 - Post operative hospital acquired infection (e.g.: urine, lung)
 - Pain
 - Bleeding – during or after the operation
 - Thrombosis - DVT/PE (post-op)
 - Anaesthesia complications:
 - Nausea and vomiting
 - Confusion and disorientation
- Specific:
 - Laparoscopic surgery
 - Always a risk the surgery will need to be converted to an open operation
 - Biliary surgery
 - Cutting of the common bile duct
 - Anastomotic leak lead to infection and further need for surgery
 - Retained stones in the CBD may occur, requiring further surgery

- Bleeding into biliary tree may lead to symptoms as per post hepatic jaundice
- CBD stricture formation
- Pancreatitis

- Thyroid surgery
 - Bleeding after surgery may lead to airway compromise
 - Hypocalcaemia which may require treatment
 - Hypothyroidism which may require treatment
 - Recurrent laryngeal nerve palsy
 - Warn patient that their voice will be different a few days post op anyway because of intubation and local swelling from the operation

- Breast surgery
 - Lymphoedema

- Arterial surgery
 - Graft infections
 - AV fistula formation
 - Graft failure

- Colonic surgery
 - Damage to other structures within the abdomen such as the kidneys
 - Leakage of the anastomoses
 - Ileus
 - Adhesions which can lead to future obstructions

- Small bowel surgery
 - Damage to other structures within the abdomen such as the kidneys
 - Leakage of the anastomoses
 - Ileus
 - Short bowel syndrome, leading to diarrhoea and malnutrition
 - Adhesions which can lead to future obstructions

- Splenectomy
 - Damage to bowel
 - Acute gastric dilatation
 - Risk of sepsis and future infections, so will need vaccinations to prevent these and will need prophylactic penicillin

- Genitourinary surgery
 - Risk of damage to other structures, may lead to subfertility (e.g.: fallopian tube damage)

- Haemorrhoidectomy
 - Stenosis

- Prostate surgery
 - Early after operation, may have blood in the urine/ejaculate
 - Urethral stricture
 - Ejaculate may be less due to retrograde ejaculation (common)
 - Incontinence
 - Impotence

- Change in timing of ejaculation – may ejaculate earlier or later than before
- Gastrectomy
 - 'Dumping syndrome'
 - Weight loss
 - Malabsorption which can lead to osteomalacia and anaemia
 - Ulceration in the stomach
 - Formation of a tumour (as gastric acid decreased)
 - Blind loop syndrome
 - Abdominal fullness and feelings of early satiety

Preoperative assessment:

- Wash hands, introduce yourself, and ask if you can assess the patient before their surgery
- Take full history from patient, asking specifically about their current medical problems and medications
- If diabetic, need to know:
 - How their glucose control is (check HbA1c and ask if they have hypoglycaemic attacks or hyperglycaemic attacks, and if so, how often)
 - What complications they have (eyes, kidneys, heart, brain, neuropathy, infection, ulcers)
 - What their medications are
 - Ask to see their BM book
 - Previous admissions to hospital?
- Pregnant?
- Neck/jaw stable? Any dentures or loose teeth?
- PMHx including previous surgery
- DHx including drug allergies
- FHx – previous problems with anaesthetic?
- SHx – smoking, alcohol, exercise and exercise tolerance, pre-operative functioning
- Examine the patient
 - Examine the main systems (abdominal, cardiovascular and respiratory)
 - Examine the area for surgery and confirm with notes
 - Calculate BMI
 - Mallampati scoring
- Check the patient's most recent blood results and other important investigations
- Read through the patient's notes - have you missed anything important?!

Specific requirements during surgery for some patient groups:

(Note: always liaise with the anaesthetist regarding changing medication around surgery)

Medication/ diagnosis	Medication to be stopped?	Details
Type 1 Diabetes	Give an injection of the patient's normal insulin on the night before surgery and then stop any further doses	<p>Make first on surgery list</p> <p>Patient should be NBM on night before surgery</p> <p>They should be started on an insulin sliding scale early on the day of the operation (this is given piggy-backed with 5% dextrose or normal saline) - see hospital guidelines for sliding scales</p> <p>Capillary glucose should be checked regularly during surgery (every 2 hours)</p> <p>After surgery, once patient has started eating, start their normal insulin regime. Then they should have their meal. The insulin sliding scale should be stopped 30 minutes after this time (as long as glucose levels are satisfactory)</p>
Type 2 Diabetes	<p>Stop short acting drugs on the day of surgery.</p> <p>Stop long acting drugs 3 days before.</p> <p>Stop metformin 2 days before until 2 days post-op</p>	<p>Make first on surgery list</p> <p>Patient should be NBM on day of surgery only</p> <p>Patient should have capillary glucose monitored every 2 hours during surgery</p> <p>After surgery, patient can resume their normal medications once eating (hold metformin for 48hours post-op)</p> <p>Insulin sliding scales should only be used if the patient is having major surgery, or is at high risk of hypoglycaemia during surgery</p> <p>NOTE: if a diet-controlled diabetic, just monitor capillary glucose during surgery</p>
Long term steroids		<p>Liaise with anaesthetist - patients may need extra cover during surgery and post surgery with IV hydrocortisone</p> <p>Watch out for hypotension which may indicate you have not given enough hydrocortisone to cover for the stresses of surgery</p>
Liver disease		<p>Give antibiotic prophylaxis (as per local guidelines)</p> <p>Consider renal dose of IV dopamine</p> <p>Check clotting and consider giving Vitamin K</p> <p>Measure urine output and monitor fluid balance regularly</p> <p>A loop diuretic may be needed if retention occurs</p> <p>Ensure adequate nutrition</p>
OCP	Stop 4 weeks before surgery	Restart 2 weeks after surgery, provided the patient is mobile
Aspirin	Stop 5 days before surgery	DO NOT STOP if the patient has recent (<1 year) coronary stents - liaise with cardiologist and surgeon regarding risk

Clopidogrel	Stop 5 days before surgery	DO NOT STOP if the patient has recent (<1 year) coronary stents - liaise with cardiologist and surgeon regarding risk
Warfarin	Minor surgery: may be able to continue - check INR pre-op, liaise with surgeon Major surgery: stop drugs 2-5 days pre-op, check INR	Anaesthetist and surgeon should discuss risks and benefits of this for each patient (depending on indication for warfarin) Ensure that you order pre-operative Vitamin K and FFP if emergency procedure Monitor clotting meticulously pre and post surgery One option is to convert to an unfractionated heparin infusion (stop 6h pre surgery and monitor APTT during the operation)
MAO-inhibitors	Stop 4 weeks before surgery	
Lithium	24 hours before if major surgery, otherwise continue	Monitor U&Es if decide to keep patient on lithium during surgery
Potassium sparing diuretics	Stop on morning of surgery	Risk of hyperkalaemia if there is renal impairment or significant tissue damage during surgery
ACE-inhibitors/ ARBs	Stop 24 hours before surgery	Associated with severe hypotension on induction of anaesthesia

Drugs which should not be stopped during surgery:

- Long term steroids
- Anti-epileptic medication
- Anti-Parkinsonian medication
- Anti-psychotic medication
- Bronchodilators
- Glaucoma medication
- Most cardiovascular drugs apart from those above
- Immunosuppressants
- Thyroxine/anti-thyroid drugs
- Drugs of dependence e.g.: benzodiazepines (this may affect anaesthesia induction)