

Procedures and Explanations of Procedures

GENERAL PROCESS: Apply to unknown procedure, may fluke it.

1. Introduce Self.
2. Ask what patient knows about the procedure.
3. Ask if patient has ever known anyone who has had this procedure
4. Ask if the patient knows the reason for having the procedure
5. Ask what the patients major concern is
6. Explain the reason for the procedure
7. Explain the sequence of events during the procedure:
 - PREPARATION
 - PROCEDURE
 - POST-PROCEDURE CARE
 - COMPLICATIONS
 - WHERE it will be done
 - WHO will do it
8. Explain the potential outcomes
9. Any further questions?

!!~ALWAYS MENTION PRIVACY~!!

Urinalysis

Need **clean mid-stream sample**.

Explain: must clean external genitalia with gauze swab.

Must urinate a little into the toilet bowl;

Then must urinate a cupful into the container provided.

The sample must be delivered ASAP

Peak Flow Meter Use

Explain: this measures the flow rate of air out of your lungs, which is the best and easiest way to measure your overall lung function.

1. Get the mouthpiece and put it on the PF meter as marked
2. Stand up or sit up straight
3. Take deep breath (as deep as you can)
4. Hold the PF meter horizontally
5. Make a seal with your lips around the mouthpiece
6. Blow as hard as you can, trying to get all the air out of your lungs as fast as you can
7. Repeat 3 times
8. Record best result on the chart
9. Repeat with medication (take ventolin, 15 min later have a go)

Venepuncture

Explain: must stress that their DOCTOR has ordered this test

Emphasise: procedure necessary for their care

Ask the pts name

Check details: is it REALLY Mrs Jones?

PROCEDURE: gloves on!!

- choose arm
- position on bluey
- tourniquet arm
- swab with alcowipe
- put needle into needle holder
- jab bevel up
- add vacutainer
- undo tourniquet
- remove needle

Complications

- Collapsed vein
- Haematoma

CPR

- Check response of patient
- Calls for help
- Turn patient to left lateral position and clear the airway
- Head tilt, chin lift to maintain airway
- Check for breathing (look, listen, feel)
- Turns patient onto back if not breathing
- Gives *full inflations (2 sec/ inflation)*.
- Checks for carotid circulation
- Start compressions with air resus mask
- 4-5 cm deep on sternum, no rocking, thumping movements
- 2 inflations to 15 compressions every 15 seconds
- (aim for 80-100/min)
- checks for return of pulse after 1 min.
- Then every 2 minutes afterwards
- Left lateral position if successful

Cannulation

1. Introduce Self.
2. Ask what patient knows about the procedure.
3. Ask if patient has ever known anyone who has had this procedure
4. Ask if the patient knows the reason for having the procedure:]
NEED TO INFUSE FLUIDS QUICKLY,
or LARGE VOLUMES,

PREPARATION:

May need to shave arm

PROCEDURE:

- 1) Sterile field, gloves
- 2) Local anaesthetic
- 3) Stretch skin
- 4) jab
- 5) hold stylet still, slide tube off it
- 6) remove stylet
- 7) cap cannula
- 8) flush with saline
- 9) tape it down
- 10) dispose of sharps
- 11)

POST-PROCEDURE :

Observe: NEED TO RE-CANNULATE IF:

- The site is inflamed
- The cannula is "tissued" i.e any fluids will go into the tissues
- Blocked: try to flush
- Still blocked: pull back away from wall, try again
- 3 days is the max lifespan

COMPLICATIONS:

Pain
Bruising/haematoma
Infection
Phlebitis
Thrombosis
Systemic sepsis

Ventolin Puffer Use

- Remove cap
- Shake well
- Breathe out gently
- Add nozzle to face
- Inhale slowly
- Press canister + inhale quickly
- Hold breath for 5-10sec
- Wait 30 sec before next inhalation

Glasgow Coma Scale

Eye Opening	E
spontaneous	4
to speech	3
to pain	2
no response	1
Best Motor Response	M
To Verbal Command:	
obeys	6
To Painful Stimulus:	
localizes pain	5
flexion-withdrawal	4
flexion-abnormal	3
extension	2
no response	1
Best Verbal Response	V
oriented and converses	5
disoriented and converses	4
inappropriate words	3
incomprehensible sounds	2
no response	1

E + M + V = 3 to 15

- 90% less than or equal to 8 are in coma
- Greater than or equal to 9 not in coma
- **8 is the critical score**
- Less than or equal to 8 at 6 hours - 50% die
- 9-11 = moderate severity
- Greater than or equal to 12 = minor injury

Coma is defined as:

- (1) not opening eyes,
- (2) not obeying commands, and
- (3) not uttering understandable words.

ECG

- Introduce Self.
- Ask what patient knows about the procedure.
- Ask if the patient has ever known anyone who's had an endoscopy

PREPARATION:

May need to shave a few areas

PROCEDURE:

Attach leads: some gel underneath
some on chest, one on each of arms and leg
then you just lie back and relax (don't move)

POST-PROCEDURE :

Observed for 2 hours after

Should not drive or make decisions for 12 hrs after

EAT NOTHING for 5 hours

Sore throat and stomach pain is normal

COMPLICATIONS:

ECG is completely harmless

Wont feel a thing,

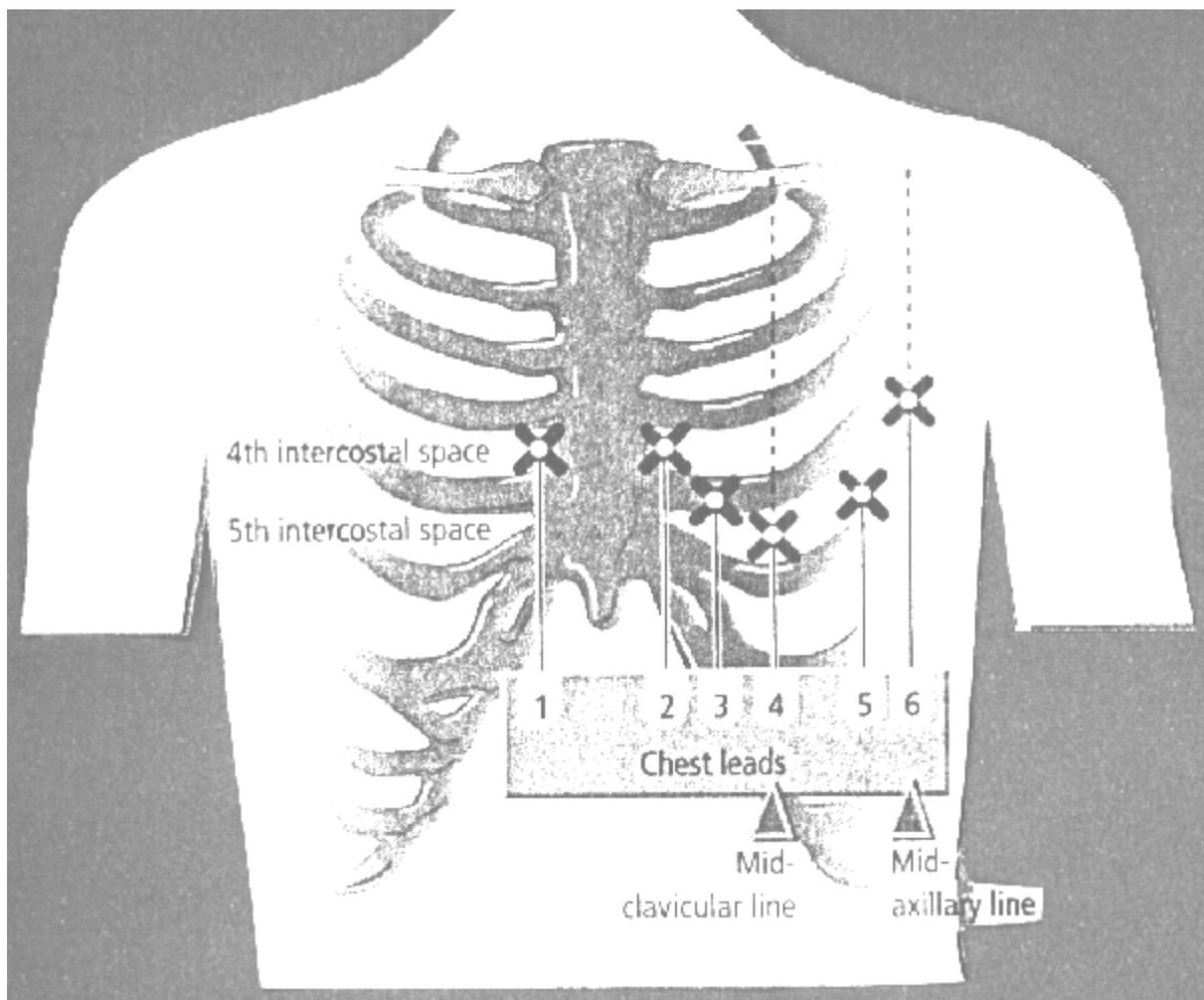
No risk of electric shock: ECG measures, not produces

Need to do it:

heart disease is serious, better prognosis if caught early

The ECG = cheapest diagnostic tool

Least invasive test (mention serology alternatives)



Nasogastric intubation

- Introduce Self.
- Ask what patient knows about the procedure.
- Ask if the patient has ever known anyone who's had a Salem-sump tube
- Explain: this will relieve abdo pressure, nausea and vomiting.
- Will experience DISCOMFORT BUT NOT PAIN (may gag, + watering eyes)
- Say: you can stop me whenever you like by raising your hand
-

PREPARATION:

Lubricant

MEASURE TUBE LENGTH: nose→ear→xiphy

Bend the tube over your hand

Lubricate first 10cm

PROCEDURE:

Thread in via nose until mark is reached

Resistance? Chin→chest = open oesophagus

Get pt. to swallow some water to help tube descend

POST-PROCEDURE :

Aspirate the tube: test aspirate: should be acidic

DO NOT FEED until X-ray has been taken

to confirm tube position

put some AIR into tube: stethoscope the epigastrium
(should hear a "boom")

COMPLICATIONS:

Perforation (rare)

Blockage (flush with coca-cola)

Incorrect placement → trachea or bronchi

Sore throat

Loss of K⁺ due to aspiration

Loss of nose integrity

Catheterisation

MALE

- Place blue underpad under buttocks and thighs.
- Surgically wash hands and don gloves.
- Arrange equipment on sterile field, draw up sterile H₂O from ampoule held by assistant, place on sterile field.
- Arrange sterile drapes appropriately.
- Using sterile gauze swabs hold penis and swab the glans and urethral meatus with antiseptic solution. (With a real patient you may need to pull the foreskin back.)
- In a real patient one would apply local anaesthetic tube nozzle to the urethral meatus, squeezing the gel into the urethra so as to minimise discomfort - using full tube, massaging gel in to reach bladder and then waiting for 90 seconds.
- Grasp penis shaft holding it upright and extended, insert lubricated catheter fully until urine flows back.
- Place open catheter end in sterile kidney dish, attach syringe with H₂O to balloon port, insert prescribed amount to inflate balloon. Connect catheter to urine bag.

FEMALE

- Place blue underpad under buttocks and thighs.
- Surgically wash hands and don gloves.
- Arrange equipment on sterile field, draw up sterile H₂O from ampoule held by assistant, place on sterile field.
- Arrange sterile drapes appropriately.
- Using sterile gauze swabs separate the labia minora, swab down with antiseptic solution starting from the inner aspect to the outer. Visualise the urethral meatus.
- Maintaining the labia apart, lubricate the catheter with KY and insert into the urethral meatus. (May also use anaesthetic gel as lubricant.)
- Insert catheter in upward and backward movement approximately 5-6 cms until urine flow is apparent.
- Inflate balloon with sterile H₂O at balloon port (prescribed amount on catheter packet). Connect catheter to urine bag.

Complications:

- infection,
- perforation,
- Injury to the urethra caused by rough insertion of the catheter
- Narrowing of the urethra caused by scar tissue
- Injury to the bladder caused by incorrect insertion of the catheter

Endoscopy

- Introduce Self.
- Ask what patient knows about the procedure.
- Ask if the patient has ever known anyone who's had an endoscopy

PREPARATION:

Fast overnight

PROCEDURE:

Only takes a few minutes

Local anaesthetic spray to throat

Asked to "swallow" the fiberoptic scope

Passed through stomach to duodenum

POST-PROCEDURE :

Observed for 2 hours after

Should not drive or make decisions for 12 hrs after

EAT NOTHING for 5 hours

Sore throat and stomach pain is normal

COMPLICATIONS:

MORTALITY 1/1000

Perforation

Aspiration

Infection

Contraindicated by recent MI or COPD

Colonoscopy

- Introduce Self.
- Ask what patient knows about the procedure.
- Ask if the patient has ever known anyone who's had a colonoscopy

PREPARATION:

Low-residue non meat fibre-rich diet

The day before: clear fluids only

The night before: bowel prep, live near toilet

PROCEDURE:

Midazolam / fentanyl solution

= conscious + responsive, but no memory of event

Lying down on your side

scope passed through anus into colon and then ileum

GAS INTRODUCED to open bowel

Only takes an hour at most

POST-PROCEDURE :

Observed for 2 hours after

Should not drive or make decisions for 12 hrs after

Wind and colicky pain is normal

COMPLICATIONS:

1/1000 times

MORTALITY 2/1000

Perforation

Over-sedation

Infection

Intravenous Injections and fluids

1. Wash your hands.
2. Reassure the patient and explain the procedure.
3. Uncover arm completely.
4. Have the patient relax and support his arm below the vein to be used.
5. Apply tourniquet and look for a suitable vein.
6. Wait for the vein to swell.
7. Disinfect skin.
8. Stabilize the vein by pulling the skin taut in the longitudinal direction of the vein. Do this with the hand you are not going to use for inserting the needle.
9. Insert the needle at an angle of around 35 degrees.
10. Puncture the skin and move the needle slightly into the vein (3-5 mm).
11. Hold the syringe and needle steady.
12. Aspirate. If blood appears hold the syringe steady, you are in the vein. If it does not come, try again.
13. Loosen tourniquet.
14. Inject (very) slowly. Check for pain, swelling, hematoma; if in doubt whether you are still in the vein aspirate again!
15. Withdraw needle swiftly. Press sterile cotton wool onto the opening. Secure with adhesive tape.
16. Check the patient's reactions and give additional reassurance, if necessary.
17. Clean up; dispose of waste safely; wash your hands.

Intramuscular Injections

For narcotics, antibiotics, vitamins, anti-emetics

2. Wash your hands.
3. Reassure the patient and explain the procedure.
4. Uncover the area to be injected
 - **upper outer buttock**
 - **lateral side of upper leg,**
 - **deltoid muscle.**
5. Disinfect the skin.
6. Tell the patient to relax the muscle.
7. Insert the needle swiftly at an angle of 90 degrees (watch depth!).
8. Aspirate briefly; if blood appears, withdraw needle. Replace it with a new one, if possible, and start again from point 4.
9. Inject slowly (less painful).
10. Withdraw needle swiftly.
11. Press sterile cotton wool onto the opening.
12. Fix wool with adhesive tape.
13. Check the patient's reaction and give additional reassurance, if necessary.
14. Clean up; dispose of waste safely; wash your hands.

Subcutaneous Injections

For Insulin, Heparin, Adrenaline, narcotics

1. Wash your hands.
2. Reassure the patient and explain the procedure.
3. Uncover the area to be injected (upper arm, upper leg, abdomen).
4. Disinfect skin.
5. 'Pinch' fold of the skin.
6. Insert needle in the base of the skin-fold at an angle of 20 to 30 degrees.
7. Release skin.
8. Aspirate briefly; if blood appears: withdraw needle, replace it with a new one, if possible, and start again from point 4.
9. Inject slowly (0.5 - 2 minutes!).
10. Withdraw needle quickly.
11. Press sterile cotton wool onto the opening.
12. Fix with adhesive tape.
13. Check the patient's reaction and give additional reassurance, if necessary.
14. Clean up; dispose of waste safely; wash hands.

Chorionic Villus Sampling

CVS is performed by removing a small sample of the placenta
It is removed with either a catheter (a thin tube) or a needle.

- Local anesthesia is used for this test.
- The sample of placenta may be obtained through the cervix.
- A catheter is inserted into the vagina and through the cervix and the sample is withdrawn.
- The sample also can be obtained by inserting a needle into the abdomen
- Most women feel fine after the test, although some may have mild bleeding (spotting) afterward.
- CVS is usually performed between the 10th and 12th weeks
- Amniocentesis and CVS carry a small risk of miscarriage

Pap smear / speculum exam

Explain: procedure is routine screen for abnormality which may lead to cancer, thus being the easiest and earliest way to detect it

PREPARATION:

- NOT menstruating
- Don't douche,
- Don't use a feminine deodorant
- Don't have sex for 24 hours before the test.

Stoma Care

1. **Temporary Stoma** - A stoma created with the intention of surgically closing it at sometime in the future.
2. **Permanent Stoma** - Cannot be reversed because the distal portion of the bowel or urinary tract has been removed, leaving no anatomic possibility for reanastomosis; or when the underlying pathological condition distal to the stoma precludes closure and normal function.
3. **Terminal or End Stoma** - Is made when the bowel is divided and the top end is brought out through the abdominal wall.
4. **Loop Stoma** - The bowel is not divided, but the loop of bowel is brought out onto the abdomen, split at the antimesenteric border and everted, usually over a 5-8cm plastic rod which ensures the loop of bowel does not slip back inside. The mucosa is sutured to the skin, and about a week later when the suture line is secure the rod is removed.

Stomas are named according to their location eg.

- **Descending colostomy - descending colon**
- **Jejunostomy - jejunum**
- **Terminal ileostomy - end of the ileum.**

Patients that have stomas require:

- Emotional support and understanding and a referral to a stomal therapist.
- The stoma should be pink to red in colour and moist. (Otherwise something is wrong with perfusion)
- All stomas should have a transparent drainable bag to allow frequent observations.

Potential Problems

Stoma necrosis - Due to lack of blood supply to stoma.
Skin excoriation, odour.
Fluid and electrolyte imbalances

Type of Discharge expected from Stomas

1. ***The Loop and End Ileostomy*** - Intermittently **continuous drainage**.
 - Contains excoriating digestive enzymes.
 - **Liquid or paste like.**
 - The more small bowel is left the thicker the discharge is likely to be.
 - Small volume ileostomies 500mls/day; high volume stomas output of up to 1000mls per day.
2. ***Colostomy*** — Likely to **resemble normal bowel motion**.
Odorous. May be semi-liquid till patient is stabilised after surgery or if there is remaining pathology.

3. **Transverse Colostomy** - Unpredictable, likely to be **semi-solid**, may be **frequent, odorous** and contain digestive enzymes.
4. **Caecostomy and Ascending Colostomy** - **Watery or semi-solid, almost continual**. Likely to contain excoriating digestive enzymes.
5. **Urostomy- Urine**. Often contains mucous when bowel is used to fashion a bladder substitute . Must be watched to ensure fluid is not cloudy or blood stained indicating infection. Concentration also needs careful consideration indicating fluid output.

- The hole in the **bag must fit exactly around the stoma** with no adjacent peristomal skin exposed to the effluent.
- Bags must be **applied when the skin is clean, dry and crease free**, other wise it will leak.
- The **peristomal skin can be washed with plain water or water with a mild soap**.
- **Do not use oils or creams.**
- If there is an abdominal wound, the appliance should be attached first so it is totally adherent to the skin, then the dressing applied to the wound
- **Bags should be emptied when 1/3 full** otherwise the weight will cause leakage.
- **New stomas pass a lot of flatus therefore the appliance needs to be emptied regularly.**