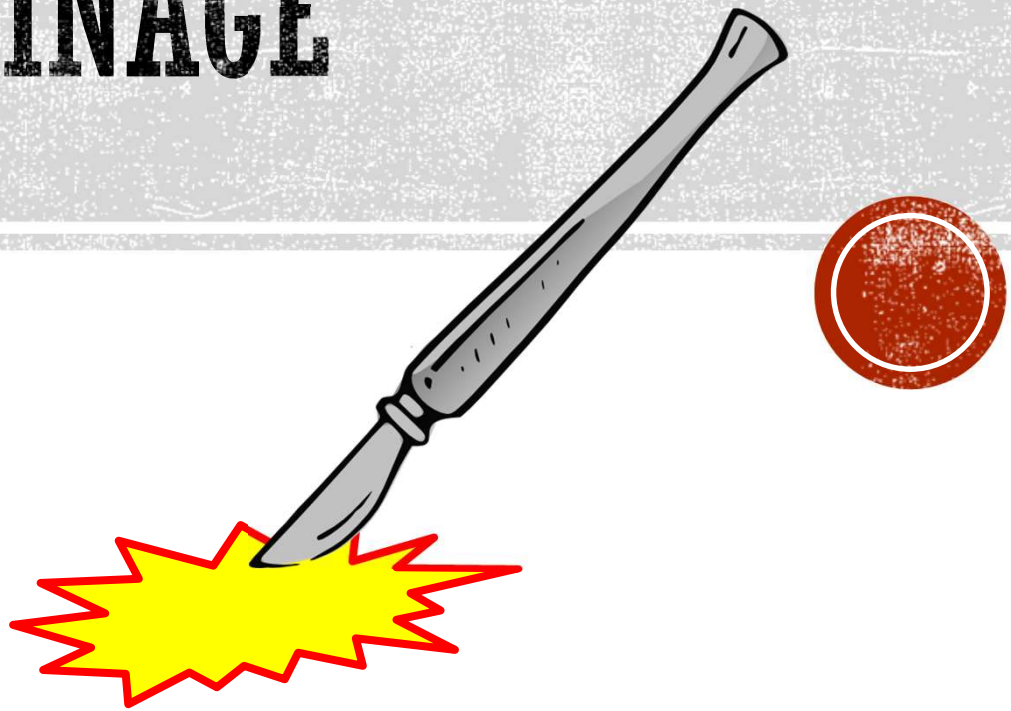
THE ABSCESS INCISION AND DRAINAGE



INTRODUCTION

- You'll always find a few of these tagged on the end of a CEPOD list and another one you'll be doing independently fairly soon
- For a quick 15 minute procedure where the most senior person in theatre on both the surgical and anaesthetic side is often a core trainee; this operation has the surprising potential to cause difficulties for you
- The key surrounds how stimulating sticking a knife into an angry abscess can be
  - So to avoid heart racing moments for both you and the patient its all about getting them deeply anaesthetised!

PRE-OPERATIVE ASSESSMENT

- Often young, hairy men – therefore mostly straightforward assessments
- However a common patient is the poorly controlled overweight diabetic which has challenges in their own right
- Key points from history
  - Location of abscess
    - This will determine surgical positioning and therefore influence your anaesthetic plan
  - Common sites
    - Pilonidal
    - Perianal
    - Gluteal
    - Back
    - Limbs

AIRWAY PLAN – TUBE V IGEL?

- There is no clear line on when an case requires a definitively secured airway and there seems to be a grey zone in the middle where different anaesthetists would choose either options
- You will have to find where you sit when coming to make these decisions – the art of anaesthesia!
- There are patient, surgical and anaesthetic factors that would determine your airway plans – here are some factors that might push you to one airway plan over another
- Most of these cases will be done on an igel

	Consider Intubating	Consider igel
Patient factors	Obese	Slim
	Reflux	No reflux
	Been nauseous/vomiting	Well starved
Surgical factors	Prone or lateral position	Supine and can have some head up
Anaesthetic factors	Out of hours – distant support (intubate under controlled conditions over an emergency)	Previous similar operation (common) done with an igel with no issues
	Concerns about laryngospasm (cant spasm if paralysed and tube in!)	

INDUCTION – DRUGS

Propofol
Have back ups ready
If young these patients will often need more than 20 mls to go to sleep

Rocuronium
(If intubating)

Unlikely to need RSI dose – use 0.6 mg/kg dose and wait 90 – 120 seconds

Anti-emetics
Two antiemetics if no contra indications
Usually ondansetron and dexametheasone

Opiate
Alfentanil or fentanyl strategies available (see next slide)
Use small amount of opiate to get airway device in

- fentanyl – 50 mcg
- alfentanil 0.5mg

<u>save most for later</u>

FENTANYL V ALFENTANIL.

- You will learn the riveting pharmokinetics of why there is a difference between these two drugs for your primary FRCA exam but for now accept
  - Alfentanil = faster onset (90 secs to peak effect), faster offset
  - Fentanyl = slower onset (~5 mins to peak effect), slower offset
- This means alfentanil is an ideal drug for situations where you want potent analgesia quickly intraoperatively for a procedure that isn't sore afterwards – like the abscess I+D!
- Speak to other anaesthetists about what they use and why and experiment with both and find what works for you
- Here are a few advantages and disadvantages of using each I have found

Fentanyl ..... micrograms/ml

Advantages	Disadvantages
We are more familiar with the drug (an important consideration)	Slower onset, need to be good with your timings
Gives some post op pain relief (these actually can be sore procedures)	Patients slow to breath/wake up after giving a large dose for a short procedure
	Groggy in recovery

Alfentanil ..... micrograms/ml

Advantages	Disadvantages
Works quick and works hard	Less familiar with the drug
Easier to wake up patients at end of short procedure	Patients can wake up sore
	Works quick and works hard – watch for apnoea and

CONDUCT OF THE OPERATION

- Despite being a quick operation there is a lot of skill to getting it right – a challenge but fun!
- Sequence for well timed deep anaesthesia
  1. Get the patient asleep and airway device in
  2. Get deep on volatile anaesthetic (aim for MACs of 2.2 – 2.4)
  3. Time your opiate
     - Fentanyl
       - Takes longer to work than you think!
       - Aim for bolusing an extra 100 mcg 4-5 mins before incision
       - A rough guide is once the surgeon is scrubbed and starts cleaning the skin – though you will need to get a feel for this
     - Alfentanil
       - Give 1 mg, 1 minute before incision – even here give it time, not just as the blade is hovering over the skin!
       - Roughly when the drape is on
  4. Time your extra propofol
     - This will work within 1 arm brain circulation time ~ 30 seconds
     - Give when you see the surgeon reach for their scalpel (good surgeons will give you a 60 seconds to incision warning)
     - Bolus 3 -4 mls of propofol from your spare 10ml syringe – flush if using fluid port
     - Make sure you have more to hand if needed

A STIMULATED PATIENT

- No matter our best intensions/skill/experience every anaesthetist will be eventually faced with the patient responding to the potent surgical stimulation of a scalpel in an angry abscess
- This is not necessarily a mistake on your behalf, some patients seem to react no matter what precautions you take – don't blame yourself
- What a stimulated patient may do
  - Jerk a limb away from painful stimulus
  - Attempt to spontaneously breath "over" the manual ventilation – causing your ventilator to alarm as peak pressures rise
  - Become tachycardic and hypertensive
  - Go into laryngospasm
    - Actually relatively rare although a situation we should all prepare ourselves for

RESPONSE TO THE STIMULATED PATIENT - 1

- Stay calm, you have the time and drugs to sort all this out
  - Remember despite any movement/response that the patient has they are deeply anaesthetised – they will not recall this
- If the response to the incision is very significant ask the surgeon to stop
  - Very reasonable request that the surgeons will respect – they don't like wriggling patients!
- Manage laryngospasm if present
  - Signs
    - Classic inspiratory stridor noise
    - High airway pressures not related to patient trying to breathe over ventilator
    - See-saw chest movement
  - Management strategies (brief summary of treatment ladder here)
    - High O2, high flows to increase O2 quick
    - Deepen anaesthesia quick (propofol)
    - PEEP
    - Paralyse

RESPONSE TO THE STIMULATED PATIENT - 2

- Deepen anaesthesia
  - Here extra propofol is your friend – give 3-4 mls and observe its effect
  - Top up with your remaining opiate
    - But remember this will take time – it will help for when the surgeons continue to scrape and clean out abscess
  - Increase MAC further, increase your flows to achieve this MAC goal faster
- Ensure ventilating well
  - Either let them breath if they are so inclined or increase the resp rate on the ventilatory to "override" their attempts to breath
  - Can tolerate some tachycardia and hypertension – your meds will catch up to it!
- When ready let surgeons resume

EMERGENCE

- Note if the patient has an igel in AND is spontaneously breathing well they can often go round to recovery with the airway device in for recovery to remove (pre-covid era)
  - Check if this is an option and once the surgeons appear to be wrapping up get the patient spontaneously ventilating by lightening the anaesthesia and slowing down the ventilator rate or even pausing it for 10 -15 seconds to see if they will start breathing
- Otherwise lighten anaesthesia and remove airway device in theatres as usual
- If the procedure was on a left/right lateral and the patient had an igel
  - Keep them on their side during emergence and removal of igel
  - The patient will appreciate not waking up sitting on their painful abscess!

ANALGESIA AND RECOVERY ROOM CARE

- Even though the pus is gone these can be relatively sore
- Intraoperative analgesia
  - Paracetamol (if not already had)
  - Ketorolac/diclofenac (if no contraindication)
  - Your opiate (alfentanil or fentanyl)
  - NOT for local anaesthetic infilatration – impress your consultant by being able to explain why! (clue – look up how local anaesthetics work in different pHs and the concept of pKa)
- Post operative analgesia
  - Write up usual pack with paracetamol/NSAID/weak opiate/antiemetics
  - Reasonable to leave recovery with boluses of IV fentanyl to give if needed
- Post operative plan
  - Most of these patients will be going home very soon
  - Clarify no antibiotics needed (often the case)
  - Clarify VTE plan (often nothing needed)