Paediatric anaesthesia made enjoyable

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Isn’t it always enjoyable?
Common challenges

• Take-off

• Landing
Induction

- Goal is smooth, safe induction in a well-prepared patient.
- Main challenges:
  - Dealing with anxiety in patient or parents
  - Selecting premedication
  - Smoothing the pre-operative process
  - Selecting induction technique
  - Contingency planning
Pre-operative anxiety

• Highly infectious
• Worse in large groups
• We must
  • Remain calm
  • Not take offence
  • Be kind and tolerant
High-risk groups

- Autism
- ADHD
- Pre-existing anxiety disorder
- Frequent procedures
- Unstable social situation
- Anxious parents
Parental anxiety

- May manifest as:
  - Second-guessing
  - Plan changing
  - Agression
This is not Nana’s house!

Avoid lies to gain trust
Avoid judgement

Everybody will feel better
Is the patient/parent too...

- Anxious?
- Naughty?
- Manipulative?
- Don’t worry about it. Just do your best for them.
Let it go
Pre-medication
Choosing sedative premedication

- Patient history (epilepsy, sleep apnoea, allergies)
- Nature of surgery (pain, bleeding, other drugs)
- Expected hospital stay
- Extent of anxiety or behavioural disturbance
Midazolam

- Rapidly acting following oral administration
- Remember to use concentrated solution
- Drunken or euphoric quality to sedation
- Occasional paradoxical agitation and dysphoria
- Short action (good and bad)
Other benzodiazepines

- Diazepam, temazepam, lorazepam
- Gentle onset without euphoria
- Longer lasting
- Tablet presentation
Clonidine

- Analgesic, anxiolytic, sedative
- Reduces pulse and blood pressure
- Many routes of administration
- Gentle onset, long duration of action
- Ideal for patients staying overnight
Ketamine

• Not a conventional sedative

• Produces a dissociative state with vivid hallucinations

• Excellent analgesia

• Very safe from cardio-respiratory perspective

• Possible dysphoria on emergence
Opiates

• Long or short acting
• Mild sedation
• Beware OSA
Local anaesthesia

- Useful for intravenous induction
- Select veins before application
The final approach
Quick, calm and confident

• Check paperwork before arriving in theatre

• Prepare parent if one is coming with the child

• Begin induction straight away

• Escort parent out as soon as the patient is asleep

• Perform final time-out after the patient is asleep and the parent has been escorted out
Monitoring can wait
Induction method

- Inhalation
  - Gradual
  - Single breath
- Intravenous
- Intramuscular
- Oral?
Distraction

• Don’t focus on the process of induction
Sleight of hand

- Distract the patient with
- A song
- Jokes
- Stories
- Nonsense
- Physical challenges
- Anything!
Nitrous Oxide

- No odour or flavour
- Pleasant quality to sedation
- Patient is half asleep prior to introduction of volatile agent or cannula
Intravenous Midazolam

- Doesn't sting
- Immediate amnesia
- Perfect start to induction
Restraint

When is it OK?
Restraint

- Consider physical restraint when it is
  - Safe
  - Justified by the proposed operation
  - Not easily avoided
- The need for restraint is usually predictable
Controlled restraint

- Immobilisation is calming
- Thrashing worsens everybody’s anxiety
- Hold the hands
- Parental involvement is comforting
Case scenarios

• Is it acceptable to restrain a:
  • Toddler for grommets?
  • Autistic teen for dental work?
  • Healthy 9 year old for gastroscopy?
Consent

• When is a child competent to give consent?
Consider cancellation when:

- Surgery is elective
- Premedication is refused
- Restraint is unsafe
- Success is more likely in the future
Plan B

Have a back-up ready so you can relax!
What could possibly go wrong?

- Difficult airway
- Difficult IV access
- Laryngospasm
- Bradycardia
Thank You