Anesthetic Management of the Pediatric Patient in a Non-pediatric Institution

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CCMC/VILLANOVA NURSE ANESTHESIA PROGRAM
Objectives

Analyze the case study data.

Define the issues that can arise as a result of caring for a pediatric patient with congenital abnormalities in a non-pediatric setting.

Discuss induction, maintenance and emergence.

Reflect on alternatives for anesthetic management.
Case Points

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<th>16 Y/O MALE</th>
<th>47KG 144CM</th>
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**Dx:** R THR

**PMH:** DOWN SYNDROME, EHLERS DANLOS, ODONTOID LAXITY, GASTROPARESIS, OSA

**SHx:** REPAIR PDA, PEG

**PS:** FUNCTIONAL LEVEL 3 YO SIGN LANGUAGE, COMBATIVENESS

**PE:** MACROGLOSSIA, SHORT NECK, MICROGNATHIA
How would you proceed with induction?
INDUCTION

Patient ➔ Play ➔ Versed ➔ Wait ➔ Mask ➔ Not so fast ➔ Transfer ➔ Like
Pharmacology

Ventilation

Hemodynamics

MAINTENANCE
How would you facilitate a smooth emergence?
Dexmedetomidine → Recovery

Emergence
What would you have done differently?
Research Highlights

Preoperative care units should have a designated area for pediatric patients and include age appropriate equipment.

Salem et al. (2015)
Demonstrated equipotent efficacy and safety for enteral administration of parental midazolam when compared to oral preparations.

Sato et al. (2010)
An intravenous dose of 0.3 mcg/kg over 10 minutes after induction reduces emergence agitation and pain in the pediatric patient.

Tan & Meakin (2010)
Children with developmental or behavioral disorders are more likely to require extreme measures of restraint at the induction of anesthesia.
References


