

Anesthetic Management of the **P**ediatric 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

16 Y/O MALE 47KG 144CM

Dx: R THR

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

SHx: REPAIR PDA, PEG

PS: FUNCTIONAL LEVEL 3 YO
SIGN LANGUAGE,
COMBATIVENESS

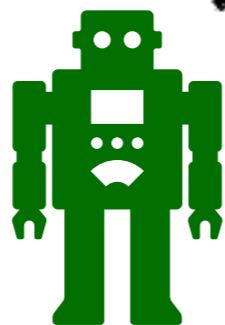
PE: MACROGLOSSIA, SHORT
NECK, MICROGNATHIA



How would you proceed
with induction?



Patient



Play



Versed



Wait



Mask



Not so fast

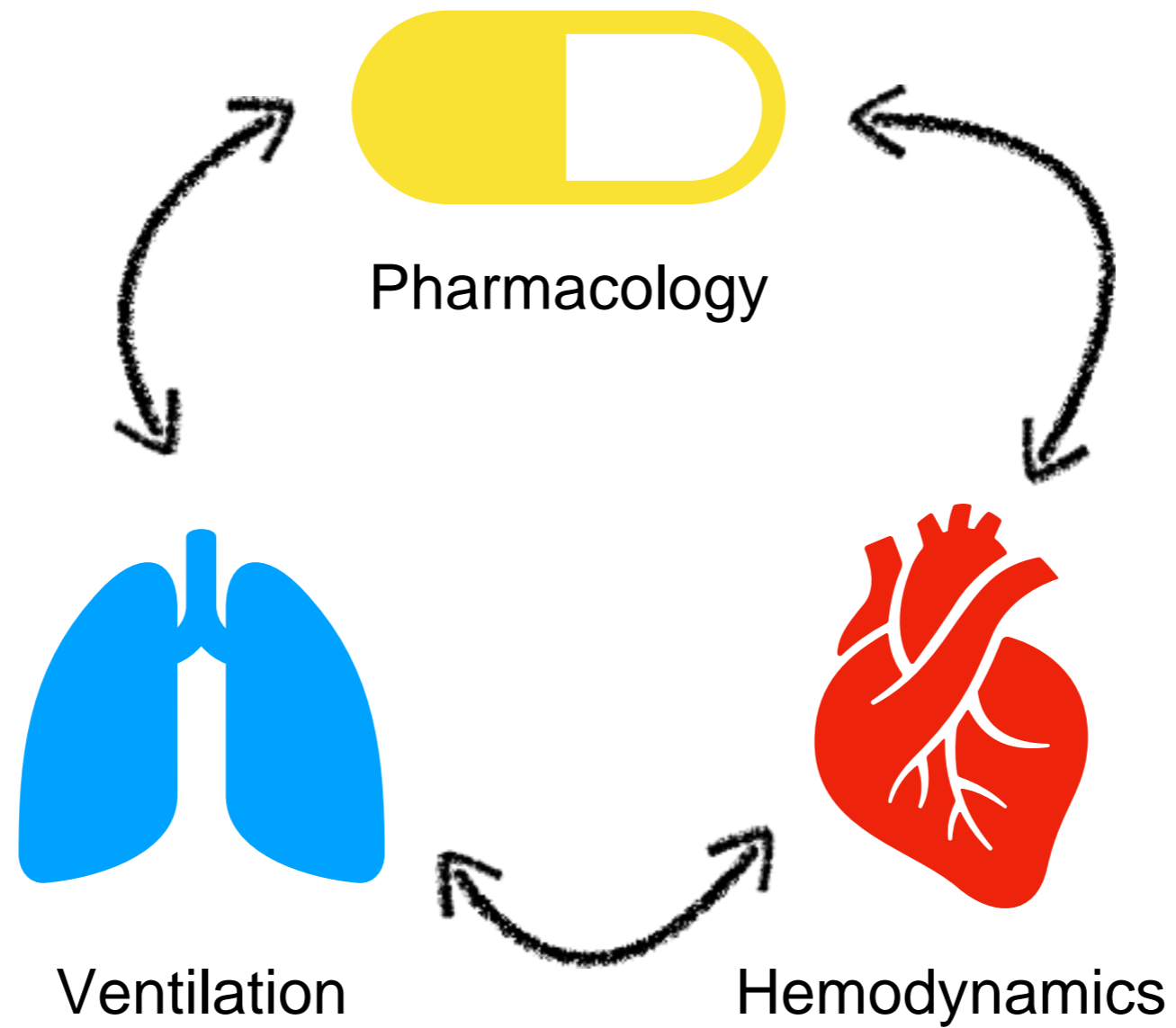


Transfer



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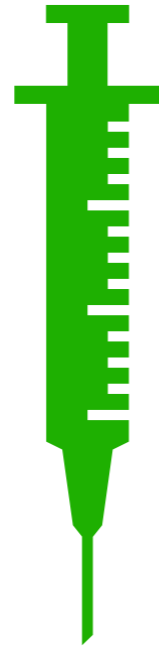
INDUCTION



MAINTENANCE



How would you facilitate a smooth emergence?



Dexmedetomidine



Recovery

EMERGENCY

What would you have
done differently?

Research Highlights

American Academy of Pediatrics (2015)

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

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- ⁷ Sato, M., Shirakami, G., Tazuke, M. N., Matsuura, S., Tanimoto, K., & Fukuda, K. (2010). Effect of single-dose dexmedetomidine on emergence agitation and recovery profiles after sevoflurane anesthesia in pediatric ambulatory surgery. *Journal of Anesthesia*, 24(5), pp. 675-682. doi:10.1007/s00540-010-0976-4