An Induction Dilemma in Pediatric Anesthesia Practice

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OBJECTIVES

Participants in this problem-based learning discussion will:

Discuss the efficacy of parental presence for induction (PPI) vs. alternatives for relieving anxiety during the preoperative period and induction of anesthesia.

Discuss the preoperative preparation of children and parents for anesthesia/surgery as well as screening for appropriateness of PPI.

Discuss the informed consent process for parents who accompany their child to the OR.

STEM CASE AND QUESTIONS

A 5 year old girl presents for dental restorations in your outpatient surgery center. Both child and mother have attended a 2 hour preoperative preparation program offered by the institution. Implied during the program is that one of the parents will be allowed to accompany their child to the OR for induction of anesthesia.

Is parental presence for induction (PPI) a good therapeutic option to reduce a child’s anxiety? Are there better options?

How should you screen parents who wish to accompany their child for induction?

Are there behavioral preparation programs that better prepare the child/parent for anesthesia/surgery? What are some of the characteristics of these programs? Should PPI for induction be implied or simply presented as a possibility?

What discussion should precede informed consent for anesthesia if it will include PPI? Should this be a separate consent process with a discussion of the risks associated with PPI? Is a separate form required?

The child refuses midazolam premedication. The father insists that he will accompany his child to the OR for induction.

What are your options for sedation at this point? When is sedation with midazolam not a good idea?

How would you handle an anxious parent concerning PPI? How do you address the parent that feels PPI is an entitlement?

The child becomes uncooperative during induction. The father is not effectively assisting with the induction or helping calm the child.

What are your options now? Would you abort the procedure? Restrain the child and continue the inhalation induction? Administer IM Ketamine?
Is parental consent necessary prior to proceeding with an alternative induction plan? What if the father refuses?

After a “Brutane” induction, the father becomes angry and violent. He storms out of the OR kicking things in his path and punches a hole in the wall of the hallway. The father is located and informed that the case has been cancelled. He begs you to continue the case and asks that you take over for your partner who started the case. You are the anesthesiologist-in-charge.

What are the risks/benefits of continuing vs. canceling the case? What should be the conditions for continuing the case? Who should be involved in this discussion?

What are your responsibilities as the “anesthesiologist-in-charge”?

The case continues uneventfully. Security and city police are notified and involved immediately. The parents are held in a separate room throughout the operative and recovery phase.

How would you proceed with the family at this point? Who should be involved in meeting with the parents following completion of the procedure and prior to discharge? What should be discussed?

When should risk management become involved? When should you contact a lawyer?

You, the surgeon, and the nursing administration have a meeting with the parents before leaving institution. Later that evening the child was taken to the ER for a fever and what the parents described as marks on her neck from the events of that day.

What are the medico-legal implications of a “Brutane” induction? Is the assent of a communicative, “normal” child required prior to proceeding? If yes, at what age?

What are the risks of PPI for the parent? What are the medico-legal implications of PPI if the parents are injured?

MODEL DISCUSSION

1. Preoperative Anxiety in Children
   a. Evaluation
      i. History
      ii. Exam
      iii. Consultants
   b. Interventions
      i. Behavioral
         1. Parental presence for induction (PPI)
         2. Preparatory programs for children
         3. Child-life experts
      ii. Pharmacological
         1. Medications
         2. Routes
         3. Risk/benefits
   c. Evidence-based approach

2. Parental Presence in the Operating Room?
a. Clinical Issues
   i. Screening of parents
   ii. Induction techniques
   iii. Physical safety
      1. Child
      2. Parent
      3. Medical personnel
b. Administrative Issues
   i. Institutional support
   ii. Preparation programs
      1. Content
      2. Timing
      3. Required or optional?
   iii. Personnel
c. Psychosocial Issues
   i. Post-traumatic issues
      1. Child
      2. Parent
d. Medico-legal Issues
   i. Consent
   ii. Liability

3. The Induction of an Uncooperative Child in the Operating Room
   a. Options
      i. Behavioral
      ii. Pharmacological
   b. Abort vs. Proceed?
      i. Child assent
      ii. Parental consent

4. The Approach to the upset and/or violent parent in the peri-operative setting
   a. Mediation/Counseling
   b. Security/Safety Issues
   c. Follow-up
   d. Risk management
   e. Legal counsel

REFERENCES

2. Lerman JB. Anxiolysis – by the parent or for the parent? Anesthesiology 2000;92:925-928