

# INHALATION TECHNIQUES IN OBA

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# OBJECTIVES

- TO DISCUSS THE ADVANTAGES OF INHALATION ANESTHESIA IN OBA
- TO LIST THE CHALLENGES THAT UTILIZING SUCH TECHNIQUES CAN PRESENT
- TO PROPOSE SOLUTIONS TO SUCH CHALLENGES AND HOW TO IMPROVE THE OUTCOMES OF PATIENT CARE UTILIZING SUCH TECHNIQUES

## ADVANTAGES

- FACILITATES INDUCTION OF GENERAL ANESTHESIA IN SMALLER CHILDREN AND INDIVIDUALS WITH NEEDLE PHOBIA
- FAVORABLE CLINICAL EFFECT INCLUDING PROFOUND CORTICAL AND BRAIN STEM EFFECTS AIDING IN DEEPER AND LESS STIMULATING ANESTHETIC AND CAN FREQUENTLY LEAD TO OPIOID-FREE PROTOCOLS AND BETTER MAINTENANCE OF LONGER ANESTHETICS
- BRONCHODILATION EFFECT IN INDIVIDUALS WITH RAD
- SHORT DURATION OF RECOVERY ESPECIALLY FOR SEVOFLURANE AND DESFLURANE

# CHALLENGES

- RISK FOR MALIGNANT HYPERTERMIA (DANTROLENE IS A MUST)
- NEED FOR EFFECTIVE SCAVENGING SYSTEM
- HIGH INCIDENT OF DELIRIUM AND AGITATION ESPECIALLY IN YOUNGER CHILDREN
- PORTABLE ANESTHESIA MACHINE OR DELIVERY SYSTEM IS NEEDED
- COST OF SEVOFLURANE IS RELATIVELY HIGH

## HOW TO IMPROVE OUTCOMES

- MAINTENANCE OF LONGER CASES WITH A VOLATILE ANESTHETIC THE SWITCHING TO PROPOFOL TIVA IN THE FINAL 30 TO 45 MINUTES OF THE PROCEDURE
- THE ABOVE TECHNIQUE ALLOWS FOR SIGNIFICANT REDUCTION IN DELIRIUM AND AGITATION IN CHILDREN
- IMPLEMENT MH PROTOCOL UTILIZING THE GUIDELINES AND TOOLS PROVIDED BY THE MALIGNANT HYPERHERMIA SOCIETY OF NORTH AMERICA
- FAMILIARIZE YOURSELF WITH THE EXISTING SCAVENGING SYSTEMS AND, IF NECESSARY, UTILIZE PORTABLE SCAVENGERS

## REFERENCES

- PREVENTION OF SEVOFLURANE DELIRIUM WITH PROPOFOL. MESSIEHA ZS ANESTH PROG 60:67-71 2013
- AN OVERVIEW OF ANESTHETIC PROCEDURES, TOOLS AND TECHNIQUES IN AMBULATORY ANESTHESIA. MESSIEHA ZS AMBULATORY ANESTHESIA 2:21-28 2015