

Inhaled Anesthesia Tips

Avoid Distressing Awareness

- Check your equipment (e.g. Vaporizer is full and well seated).
- Use EEG monitor to guide pharmacodynamic endpoint (sufficient hypnotic effect).
- Target alpha/theta spindles and delta waves on EEG trace or red train tracks in delta and alpha frequency bands on the spectrogram (depending on which monitor is being used).
- Do not rely exclusively on processed EEG index.
- Use <u>exhaled</u> age-adjusted MAC to guide sufficient hypnotic dosing (effect-site concentration).
- Set an <u>audible alert (alarm) for low end tidal volatile anesthetic concentration</u> to ensure that inhaled anesthetic is being delivered, as intended.
- Consider targeting <u>brief</u> deep anesthesia (e.g. periods of EEG suppression) for intense stimuli (e.g. intubation, incision)
- Provide adequate analgesia.
- Avoid excessive NM-blockade (e.g. maintain 2 twitches on TOF).
- Reverse NM-blockade prior to discontinuing volatile anesthetic at the end of the case.
- Ensure sufficient analgesia is on board at emergence.

Avoid Excessive Hypnosis

- Use EEG monitor to guide pharmacodynamic endpoint (note excessive hypnotic effect, e.g. EEG suppression).
- Target alpha/theta spindles and delta waves on EEG trace or red train tracks in delta and alpha frequency bands on the spectrogram (depending on which monitor is being used).
- Do not rely exclusively on processed EEG index.
- Use age-adjusted MAC to avoid excessive hypnotic dosing (effect-site concentration).
- Consider decreasing volatile anesthetic concentration rate in the face of EEG suppression.

Avoid Prolonged Emergence

- Use EEG monitor to guide down-titration of volatile anesthetic towards the end of the case.
- Do not rely exclusively on processed EEG index.
- Use age-adjusted MAC to guide safe down-titration of volatile anesthetic towards the end of the case.
- Provide adequate analgesia to allow minimization of volatile anesthetic.
- Discontinue volatile anesthetic early while continuing analgesic administration towards the end of the case <u>after reversal</u> of NM-blockade.

Avoid Unwanted Intraoperative Movement

- Target age-adjusted MAC for volatile anesthetics
- Provide adequate analgesia alongside volatile anesthetics
- Monitor depth of neuromuscular blockade when using paralytic agents
- Consider targeting <u>brief</u> deep anesthesia (e.g. periods of EEG suppression) for intense stimuli (e.g. intubation, incision)