



Avoid Distressing Awareness

- Check your equipment (e.g. IV is running, infusion pumps are working and correctly programmed).
- 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 pharmacokinetic modeling (e.g. stanpumpR.io) to guide sufficient hypnotic dosing (effect-site concentration).
- Consider targeting brief deep anesthesia (e.g. periods of EEG suppression) for intense stimuli (e.g. intubation, incision)
- Provide adequate analgesia with a continuous infusion (e.g. remifentanyl 0.05-0.2 mcg/kg/min).
- Avoid excessive NM-blockade (e.g. maintain 2 twitches on TOF).
- Reverse NM-blockade prior to discontinuing propofol at the end of the case.
- Ensure sufficient analgesia (e.g. sufentanil, fentanyl, methadone, hydromorphone, ketorolac, ketamine) is on board at emergence.

Avoid Excessive Hypnosis

- Use EEG monitor to guide pharmacodynamic endpoint (not 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 pharmacokinetic modeling (e.g. stanpumpR.io) to avoid excessive hypnotic dosing (effect-site concentration).
- Decrease propofol infusion rate throughout the case (guided by PK modeling) to avoid excessive accumulation.
- Consider decreasing propofol concentration rate in the face of EEG suppression.

Avoid Prolonged Emergence

- Use EEG monitor to guide down-titration of propofol towards the end of the case, while maintaining sufficient hypnotic effect.
- Do not rely exclusively on processed EEG index.
- Use pharmacokinetic modeling (e.g. stanpumpR.io) to guide safe down-titration of propofol towards the end of the case (target lower effect site concentration) to avoid excessive accumulation.
- Provide adequate analgesia (e.g. remifentanyl, sufentanil, fentanyl, methadone, hydromorphone) to allow minimization of propofol.
- Discontinue propofol early while continuing analgesic administration towards the end of the case **after reversal of NM-blockade.**

Avoid Unwanted Intraoperative Movement

- Use a **concomitant analgesic infusion**, as opposed to intermittent boluses alone (e.g. remifentanyl, sufentanyl, dexmedetomidine)
- Provide **adequate analgesia** alongside propofol for TIVA anesthetics
- **Monitor depth of NM-blockade** when using paralytic agents
- Consider **targeting brief deep anesthesia** (Ex: periods of EEG suppression) for intense stimuli such as intubation and surgical incision