Reduced Risk of Awareness with Recall

- Large-scale, prospective studies show that the use of the BIS monitoring system reduces the incidence of intraoperative awareness with recall by 80%.\textsuperscript{1,2}
- With BIS technology as part of protocols to assess and titrate sedation in ICU patients receiving continuous infusions of paralytics, one hospital achieved a 78% reduction in patient recall of unpleasant experiences.\textsuperscript{3}
- Numerous studies have demonstrated that the BIS monitoring system can be used to track the probability of consciousness and memory function.\textsuperscript{4-7}

Drug Savings

- Prospective, randomized studies have consistently shown reductions in the use of hypnotic anesthetics (propofol, isoflurane, desflurane and sevoflurane) ranging from 15% to 40% compared to standard clinical practice.\textsuperscript{8-13}
- In a meta-analysis to examine the impact of the BIS monitoring system in ambulatory anesthesia, the use of BIS™ sensors resulted in a net additional cost of $5.55 per patient once cost-savings related to reduced anesthetic use, reduced incidence of postoperative nausea and vomiting, and reduced time in PACU were accounted for.\textsuperscript{14}
- With BIS technology as part of protocols to reduce costs and length of stay in the ICU, a health system achieved a 58% reduction in the average monthly cost of sedative drugs.\textsuperscript{15}
- With BIS technology as part of protocols to assess and titrate sedation in patients receiving continuous infusions of paralytics, one hospital achieved an 18% decrease in the cost of sedative drugs for an average savings of $150 per patient.\textsuperscript{3}
- Using the BIS monitoring system to optimize care delivery by standardizing sedation assessment, one study found a sedative drug savings of $185 per patient per day while maintaining adequate sedation levels.\textsuperscript{16}

Improved Patient Satisfaction

- BIS technology use with desflurane anesthesia was associated with improved patient satisfaction, probably because of decreased postoperative nausea and fewer episodes of inadequate hypnosis.\textsuperscript{12}
- Patients undergoing general anesthesia for outpatient surgery who were monitored with the BIS monitoring system reported significantly less postoperative nausea and vomiting during the recovery period.\textsuperscript{17}
FASTER WAKE-UPS

• Studies have shown that patients monitored with BIS™ technology wake up 30% to 40% faster (overall average of three to six minutes faster in the OR).8, 9, 18 The associated potential savings on OR and PACU labor requirements have been described.18

• Studies have shown that the number of patients who take an extended time (15 minutes) to wake up is reduced from 16% down to 5%.9 This can result in improved OR turnover and more efficient room scheduling.

• The BIS monitoring system enables more effective titration of sedatives to maintain a suitable level of consciousness, while reducing procedure time.20

• The BIS monitoring system correlates with the OAA/S scale and therefore provides an objective measure of sedation during endoscopy.21

SHORTER PACU STAY

• Studies have shown that patients monitored with BIS technology are eligible for PACU discharge 16% sooner.8

• 87% more patients monitored by BIS technology are fully awake and oriented on PACU arrival, facilitating implementation of phase 1 PACU bypass programs.8, 22

• A study of more than 1,000 general surgery patients showed that BIS monitor titration reduced the occurrence of patients still intubated on arrival to the PACU by 55%.23

References


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