

Role of Artificial Intelligence in Anesthesia: Revolutionizing Patient Safety and Care

Dear Editor,

Artificial intelligence (AI) is being incorporated into more and more medical specialties, and its use in anesthesia has demonstrated significant potential to improve clinical results and patient safety. This letter to the editor outlines AI's changing role in anesthesia, highlighting the technology's revolutionary potential.^[1]

AI in anesthesia has several significant benefits. Machine learning algorithms may analyze large volumes of patient data in real time, which helps anesthesiologists make more accurate and customized judgments. AI technologies dramatically lower the probability of unfavorable outcomes during surgery by continually monitoring the patient's vital signs and giving early alerts of abnormalities. AI may also optimize medication doses, lowering the risk of anesthesia-related issues and expediting the paperwork process, which may increase operational efficiency.^[2]

Creating prediction models is a crucial component of AI in anesthesia. These algorithms assist anesthesiologists in proactively controlling risks using patient data to forecast issues connected to anesthesia. AI can also help automate repetitive procedures, freeing anesthesiologists to concentrate more on difficult decisions and patient care.^[3]

There are still issues that need to be resolved despite these revolutionary advantages. Data protection, model interpretability, and interaction with current health-care systems are the most important factors. Furthermore, medical practitioners must have thorough training in the use of AI.^[4,5]

In conclusion, AI is becoming increasingly crucial to anesthesia since it improves patient safety, streamlines procedures, and gives anesthesiologists more tools. AI technologies can completely change how anesthesia treatment is provided in the future, which might result in better patient outcomes and a more effective health-care system overall.

AUTHORS' CONTRIBUTION

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Conflicts of interest

There are no conflicts of interest.

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