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主題：

The debate between volatile anesthesia and total intravenous anesthesia for cardiac surgery

摘要：

Cardiac surgery carries significant risks, including postoperative complications. The choice between total intravenous anesthesia and volatile anesthesia for maintaining anesthesia during cardiac surgery has been a topic of debate. Total intravenous anesthesia, using propofol with other sedative or analgesic agents, has shown benefits such as reduced postoperative nausea and vomiting or lower pollution. Volatile anesthesia, including isoflurane, sevoflurane or desflurane, offers advantages like ischemic preconditioning and ease of use. However, trials and meta-analyses have yielded conflicting results regarding outcomes. In 2019, a major multicenter trial (MYRIAD) found no significant differences between volatile anesthesia and total intravenous anesthesia in long-term outcomes. Technical challenges exist when using either technique during cardiopulmonary bypass, resulting in variable approaches for anesthetic maintenance in cardiac surgery. Ultimately, the optimal technique remains uncertain. The anesthesiologists should consider patient characteristics and surgical requirements when choosing between total intravenous anesthesia and volatile



anesthesia. Further research is needed to draw definitive conclusions.