Music eases surgery and speeds recovery, Indian study finds

Under the harsh lights of an operating theatre in the Indian capital, Delhi, a woman lies motionless as surgeons prepare to remove her gallbladder. She is under general anaesthesia. Yet, amid the hum of monitors and the steady rhythm of the surgical team, a gentle stream of flute music plays through the headphones placed over her ears. Even as the drugs silence much of her brain, its auditory pathway remains partly active. When she wakes up, she will regain consciousness more quickly and clearly because she required lower doses of anaesthetic drugs such as propofol and opioid painkillers than patients who heard no music.

That, at least, is what a new peer-reviewed study from Delhi's Maulana Azad Medical College and Lok Nayak Hospital suggests. The research, published in the journal Music and Medicine, offers some of the strongest evidence yet that music played during general anaesthesia can modestly but meaningfully reduce drug requirements and improve recovery.

The study focuses on patients undergoing laparoscopic cholecystectomy, the standard keyhole operation to remove the gallbladder. The procedure is short - usually under an hour - and demands a particularly swift, "clear-headed" recovery.

To understand why the researchers turned to music, it helps to decode the modern practice of anaesthesia: "Our aim is early discharge after surgery," says Dr Farah Husain, senior specialist in anaesthesia and certified music therapist for the study. "Patients need to wake up clear-headed, alert and oriented, and ideally pain-free. With better pain management, the stress response is curtailed." "Although the patient is unconscious and will remember nothing, their body still reacts to the stress with changes in heart rate, blood pressure, and stress hormones."

The team of researchers wanted to know whether music could reduce how much propofol and fentanyl (an opioid painkiller) patients required. Less drugs means faster awakening, steadier vital signs and reduced side effects.

Patients exposed to music required lower doses of propofol and fentanyl. They experienced smoother recoveries, lower cortisol or stress-hormone levels and a much better control of blood pressure during the surgery. "Since the ability to hear remains intact under anaesthesia," the researchers write, "music can still shape the brain's internal state."

Clearly, music seemed to quieten the internal storm. "The auditory pathway remains active even when you're unconscious," says Dr Wadhawan. "You may not remember the music, but the brain registers it." As the research team prepares its next study exploring music-aided sedation, building on earlier findings, one truth is already humming through the data: even when the body is still and the mind asleep, it appears a few gentle notes can help the healing begin.