

When surgeons listen to their preferred music, their stitches are better and faster

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These are lead authors Drs. Shelby Lies and Andrew Zhang. Credit: The University of Texas Medical Branch at Galveston

A new study from The University of Texas Medical Branch at Galveston shows that when plastic surgeons listen to music they prefer, their

surgical technique and efficiency when closing incisions is improved. The study is currently available in the *Aesthetic Surgery Journal*.

From classical to rock, [music](#) can be heard in operating rooms across the world. Although previous studies have shown that listening to music during operations can lower the stress levels of surgeons, there is limited information on the effects of music on technical performance while completing a surgical task, such as closing incisions. Stitching prowess and speed is especially important for [plastic surgeons](#).

Fifteen plastic surgery residents were asked to close incisions with layered stitches on pigs' feet obtained at a local food market - pigs' feet are widely accepted as similar to human skin.

The residents were not informed of the purpose of the study. They were asked to do their best and to notify the researchers when they completed a closure. The day after the first incision closing exercise, the residents were asked to do another repair using identical technique with the music either being turned on or off, in opposition to the first closure. They were not told that the researchers were comparing times or that the results would be graded until the study was completed.

"We recognized that our subjects could potentially improve on the second repair simply as the result of repetition," said author Dr. Shelby Lies, the UTMB chief [plastic surgery](#) resident. "This effect was reduced by randomly assigning the residents to music first or no music first groups."

The average repair completion time for all residents was 7 percent shorter when their preferred music was playing. This effect was magnified as the experience of the surgeon grew. Playing their preferred music led to a 10 percent reduction of repair time for senior residents as compared to an 8 percent time reduction seen in the junior residents.

"Spending less time in the operating room can translate into significant cost reductions, particularly when incision closure is a large portion of the procedure, such as in a tummy tuck," said Lies. "Longer duration under general anesthesia is also linked with increased risk of adverse events for the patient."

The quality of the work was judged by plastic surgeons who did not know whose work they were analyzing or other conditions of the study. The judges' ratings confirmed an overall improvement in repair quality while music was played, regardless of whether the resident did the repair with their music first or second.

"Our study confirmed that listening to the surgeon's preferred music improves efficiency and quality of wound closure, which may translate to health care cost savings and better patient outcomes," said author Dr. Andrew Zhang, UTMB assistant professor of surgery in the division of plastic and reconstructive surgery.

More information: *Aesthetic Surgery Journal*,
[asj.oxfordjournals.org/content ... 7/09/asj.sju161.long](https://www.asj.oxfordjournals.org/content/31/7/09/asj.sju161.long)

Provided by University of Texas Medical Branch at Galveston

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