

HEALTH

MONDAY, JULY 13, 2026

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CHECKMayo Clinic Q&A: How
is robotic technology
changing liver and
abdominal surgery?

MAYO CLINIC NEWS NETWORK (TNS)

DEAR MAYO CLINIC: I have a benign lesion on my liver that needs to be removed. My surgeon said he would use robotic-assisted surgery. Can you tell me more about that?

ANSWER: Yours is a common question. When people first hear “robotic surgery,” they often think of a robot on autopilot doing the procedure. However, that couldn’t be further from the truth. The robotic arm is a tool driven by the surgeon, following maps created from pre-operative imaging.

Robotic technology is being used during abdominal surgery for benign and cancerous tumors in the liver, pancreas, colon and rectum, as well as gallbladder removal.

Your liver helps digest food, rids the body of waste products and makes clotting factors that keep blood flowing well, as well as performs other tasks. Parasites, diseases, viruses, infections, injury, cancer, alcohol use, obesity and inherited factors can all damage your liver.

Any of these causes may lead to surgery, including the use of robotic technology, which can benefit patients in several ways.

With open surgery, an incision would be made from the breastbone to your navel or sometimes with a right-angle turn like a hockey stick. The benefits of robotic-assisted surgery include:

- Smaller incisions, which lead to less blood loss and stress on the body.
- Reduced postoperative pain.
- A lower risk of surgical complications.

In general, with less pain, recovery is faster, and the risk of complications such as pneumonia or intestinal temporary paralysis, which can occur in up to 20% of all open abdominal surgeries, is less because patients are up and moving sooner.

Prior to surgery, patients undergo a CT scan and MRI, which will provide the imaging needed for your surgeon and for mapping. If surgery is due to cancer, this imaging may have been done periodically to watch for changes or as part of the patient’s treatment.

The surgery includes a team of professionals who administer anesthesia, fluids and blood, if needed, and monitor the heart and blood pressure. Patients also have a urinary catheter inserted most of the time.

Once the patient is under anesthesia, the surgeon makes multiple incisions slightly less than 1/2 inch long and one incision about 2 inches long, if needed, to remove larger specimens from the abdomen. Using the robot’s arms as extensions of their hands, the surgeon uses a variety of tools, including those to make incisions, apply clips, seal structures, sew sutures and remove tissue from the surgical site. Tiny cameras deliver magnified views to allow the surgeon to see the whole process in detail.

Once the surgery is complete, the incision typically is closed with absorbable sutures and glue so that stitches don’t have to be removed postoperatively. No bandages are needed, and patients can shower 48 hours after the surgery.

Some surgeries require the removal of a portion of the liver. Up to 70% of a healthy liver can be removed and still function effectively. However, if a liver has been damaged by chemotherapy and other causes, as little as 50% may be removed. It’s a myth that the liver regenerates. However, the remaining liver segment will grow large enough to function and compensate for the loss.

While robotic-assisted surgery is minimally invasive, it’s still invasive. After surgery, patients are watched for complications from bleeding and anesthesia, as well as any effects on their hearts and lungs, similar to other general surgical procedures.

In liver surgery, there’s also a small risk of bile leakage. Bile is the green fluid produced by the liver and channeled to the small intestine to aid with digestion. Leaks typically can be spotted during surgery, but if one develops, it can be corrected with endoscopic procedures or radiological interventions.

Opportunities for using robotic technology in liver and abdominal surgeries are expanding. Robotic technology opens the door to training more physicians in its use for surgeries ranging from less complex to more complex. As more surgeons become proficient in its use, the pool of patients who can undergo surgery to benefit their health, recovery and general well-being also widens.

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GINA FERAZZI/LOS ANGELES TIMES/TNS PHOTOS

Hikers pass a wind phone that has been vandalized on Mt Rubidoux on Aug. 1, 2025, in Riverside, California.

WHEN GRIEF
NEEDS A VOICE

Finding comfort and solace in California’s ‘wind phones’

GINA FERAZZI

Los Angeles Times (TNS)

LOS ANGELES — It was a hot and dry summer night in 2019 when the Campbell family drove from Los Angeles to their new desert vacation home in Joshua Tree.

As they crested a hill on Highway 62, a drunk driver crashed into their car.

Ruby, 17, and Hart, 14, were killed.

To channel their grief, their parents — like thousands of people across the globe — created a “wind phone.”

Sitting on a patch of desert sand, the wind phone created by Colin Campbell and Gail Lerner consists of a wooden box sitting atop a cabinet with a chair nearby. Inside the box is an old rotary telephone. There are no wires. But those who want to can pick up the receiver to say out loud the emotions they’ve bottled inside — a chance to reflect, reminisce and, in a way, connect.

The first wind phone was created in 2010 by Japanese garden designer Itaru Sasaki after the loss of his cousin to cancer and then later was dedicated to lives lost in the 2011 tsunami.

In the San Jacinto Mountains, another wind phone is nestled inside an old wooden toolbox attached to a tall pine tree in the community of Idyllwild.

Vietnam veteran Millard Elston, twice widowed, created the phone and the homemade bench where it sits. In the early evening, just before dusk, the sun peeks through the trees and warms the bench.

“It’s a feeling of serene quietness and comfort and not feeling pressure or vulnerable,” Elston said. “It’s just a way of expressing your feelings, when you have nowhere else to go or you just want a quiet time and let the wind take it.”

In the San Gabriel Mountains, a blue wind phone stands on a foggy forest ridge near a roadside turnout in Wrightwood. A weathered notebook contains messages from those who have stopped by. On the cover of the notebook is an invitation: “Write the date and where you are from and about your loved one if you wish.”

This wind phone is dedicated to Robert Byrne, 28, whose 1995 disappearance is still unsolved.

His sister, Laurie Kathleen Byrne, created the phone. She believes he was abducted and murdered.

To the west in Duarte, an old tan



A blue wind phone sticks out in the mountainous terrain on a hillside near a road side turnout on April 21, 2026, in Wrightwood, California. The wind phone is dedicated to Robert Byrne, 28, whose 1995 murder is still unsolved.

rotary phone with a very long cord hangs on a tree in a garden. This wind phone is on the grounds of the City of Hope, one of the country’s leading cancer centers.

Breast cancer survivor Nancy Clifton-Hawkins, who was treated at the City of Hope, bought the phone on EBay for \$50. It’s the exact model she had in her childhood home in Long Beach.

The first time she used the phone was to speak to her mother, who died of pancreatic cancer. She recently talked to a City of Hope employee who “had tears in her eyes when she told me about calling her mom.”

“There is something so therapeutic in physically dialing the number,” Clifton-Hawkins said. “While you won’t hear a dial tone, you will always be connected.”

Colin Campbell recalls feeling that same connection. “I first encountered a wind phone at St. Jude’s Days of Remembrance and I used their wind phone to call my kids, Ruby and Hart,” he said. “It felt so intimate and the words came so easily.

“It brought me some solace, and I wanted to share that feeling with other mourners. So my wife and I built our wind phone in Joshua Tree, in honor of our kids.”

In nearby Altadena, another wind phone sits in a wooden framed telephone booth with vertical glass

windows at the end of a brick walkway.

“My original plan was to build it in dedication to my father, who was dying of cancer. After the Eaton fire, it became a project for everyone,” said Seamus Bozeman, a reporting fellow at the Los Angeles Times, who lost his home in the blaze.

The wind phone sits behind the Healing Arts Center in a quiet garden area. “It’s meant to be for you and you only to say what you mean into the wind,” Bozeman said.

Next to the black rotary phone, which used to belong to Bozeman’s mother, a pink rock appeared one day with the words, “You are Beautiful.”

Since most wind phones are in public spaces, they can be subject to vandalism. Such is the case of a phone dedicated to Jacqueline Player, 26, who died by suicide. Player’s cousin created the wind phone for “Jax” and placed it next to a walking trail at Mt. Rubidoux in Riverside.

But what was once a small memorial is now just the base of an old rotary phone without the handset.

Earlier this year, the phone erected for Ruby and Hart Campbell was moved to a more public location. It can now be found at the Joshua Tree Retreat Center, where more people can see it and send a message in the wind.

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