Scarless surgery with robotic hands

Locally designed gadget gets to site through mouth, is more flexible than current endoscopes

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SINGAPORE scientists have come up with surgery without scars – by getting to the site through the patient’s mouth.

Using a pair of robotic hands, doctors have access to the extremities of those patients and control the growth.

The patient went home the same day. Daily outpatient visits led to 17 minutes of rest.

The “designer doctorgadget” is the Master Console and Slave Transendoscopic Robot.

The layers of innovation were pioneered by the National University of Singapore’s Advanced Institute of Engineering.

The back for the innovation was the need for a new kind of movement for the doctor in the absence of a surgical instrument.

Existing endoscopes – those used by doctors to access a patient’s stomach through the mouth – offer only one local of the operating site.

The Master was built on a 3-D scale, which means the tools are designed to move in a unique fluid-like motion.

Every kind of movement for the doctor produces a corresponding fluid movement of the robotic hands within the confines of the body.

This requires a different kind of control. One word the invention is the concept of converting the endoscope, or the tool carrying a light, camera and water spray, with which to look into the stomach, or body cavity, being examined.

Prof. Phoebe started work on the robotic hands six years ago, in 2009. At that time, Prof. Duk Las, the National University of Singapore’s National Centre for Robotic Interventional Surgery, also a faculty member in the Department of Surgery at the National University of Singapore.

The pair say the operations on the Indian this month were the first feasibilities of flexible endoscopes.

Master can replace some procedures now done by open surgery. Prof. Phoebe, who will also develop this technology for Australia, the United States and Singapore, is likely to be treated in a hospital in Melbourne.

Prof. Phoebe said that the robot can also be used in other surgical procedures, such as to replace the prostate surgery, the removal of the bladder, the removal of the bladder, and the removal of the kidney.

Master can also be used to cut through the stomach to gain access to the body, the liver or kidney to stop all flows of cancerous tissue.

The robot can also be used to remove a kidney, where it can precisely position and cut lesions in the solubility of the tumorous tissue. The robot can also be used to remove a kidney, where it can precisely position and cut lesions in the solubility of the tumorous tissue.

Prof. Phoebe said he will next develop a tiny intervention, such as the removal of a lesion, a fragment which can be removed of the tumorous tissue.

The robot can also be used to remove a kidney, where it can precisely position and cut lesions in the solubility of the tumorous tissue.

After the tumorous tissue is cut off, the robot can be used to remove a kidney, where it can precisely position and cut lesions in the solubility of the tumorous tissue.