

The international team of researchers, led by the University of Waterloo (Canada), is developing a new technology for combating kidney stones using tiny robots.

Treatment of stones usually boils down to painkillers and dissolving drugs that act slowly. In severe cases, stones have to be removed with surgically.

Scientists of Waterloo proposed another way: to use soft, thin strips with a length of 1 cm, equipped with magnets and enzyme urease. These mini-robots are controlled by doctors using a magnetic manipulator and directed directly to the stones. The enzyme reduces the acidity of urine, and the stones begin to dissolve, becoming small enough to go out naturally in just a few days.



University of Waterloo

The method has already been successfully tested on 3D urinary tract models. According to the head of the project, Professor Veronika Magdanz, the technology can become a real salvation for patients.

The next step of the command is to test large animals and improve the control system, including a robotic hand with a magnet and ultrasound control in real time.



In Canada, mini-robots were created that dissolve the stones in the kidneys

News -in -law materials cannot be equated to the doctor's prescription. Before making a decision, consult a specialist.