

## | Scientific Commercialization

# First Spinal Electrode Implantation Robot Experiment **Successful.**



Recently, the first robot-assisted spinal cord electrode implantation animal experiment is jointly completed by the University of Science and Technology Beijing professor Zhang Jianhua team and Beijing Tiantan Hospital chief He Jianghong team in Beijing, which was successful. The experiment proved that the first real humanoid double-armed intervention robot developed by the team can complete the spinal electrode implantation surgical process. The doctor was not subjected to X-ray radiation, and the surgical effect is good. No adverse events, robot-assisted spinal electrode implantation surgery has significant advantages, and fills the domestic spinal electrode implantation of the blank of robotic technology applications.

Spinal electrode implantation is a surgery that requires the placement of electrical stimulation between the internal spinal cavity and the epidural cavity. And intermittent electrical stimulation is used for treatment. This type of surgery is a typical "harmful, dangerous, blind, and difficult" surgery: the wire-eating greatly jeopardizes the health of the doctor; the highly sensitive surgical area exacerbates the "dangerous" nature of the surgery; the lack of three-dimensional image of the semi-"blind". The operation is performed in a semi-blind manner, and the surgery is extremely difficult. These surgeries need to break through the above bottlenecks by utilizing the advantages of precise positioning, acute perception and precise operation of robots.