



Changsha Kezhong Medical Technology Co., Ltd.



Craniocerebral minimally invasive surgical imaging catheter

Disposable tissue retraction and dilation catheter

🏠 Address of Marketing Center: 2F, Building 9, Jinan Biomedicine
Port, Licheng District, Jinan, Shandong Province
☎ Tel. of Marketing Center: 0531-83233017
✉ Email: jnyiliao@163.com

Craniocerebral minimally invasive surgical imaging catheter

Disposable tissue retraction and
dilation catheter

“Zero-distance contact imaging” technology

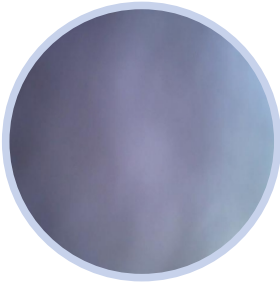
Technological innovation

Contact imaging realizes full intraoperative visualization.

Through proprietary patented technology, images remain clear under close adhesion and encapsulation by brain parenchyma. This contact imaging intraoperative visualization technology realizes “dynamic visualization during puncture” and “clear imaging upon zero-distance contact with tissue surfaces”.

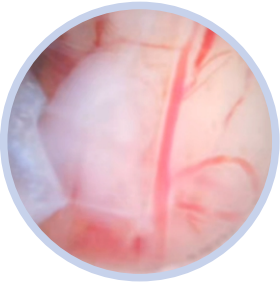
Based on major progress in modern video signal acquisition and anti-interference technologies, this innovative imaging method transforms traditional blind sight procedures such as puncture, exploration, retraction, target confirmation, and surgical channel establishment into fully dynamic, high-resolution and high-magnification visual operations, ushering craniocerebral surgery into a new era of “intraoperative visualization and accurate minimally invasive surgery”.

Contact neuro-endoscopy-assisted cerebral hematoma evacuation under direct vision, a SCI paper about this product, has been published and included in *Neuroendoscopic Surgical Treatment of Hypertensive Intracerebral Hemorrhage* published by People’s Medical Publishing House in 2022.



Conventional endoscope

Imaging is impossible at zero distance.



This technology

Clear imaging in brain parenchyma

Endoscopic body can be shaped.



The imaging catheter can be moderately shaped to convert a straight-view endoscope into a curved one, or a 0° lens into an angled lens, meeting specific clinical requirements.

Advantages



Visual puncture

The patented contact imaging technology enables clear visualization of microvessels for visualized puncture and exploration.



Accurate catheter placement

Accurately reach the target, guide the establishment of instrument channel, and achieve accurate and visualized catheter placement.



Clear imaging

Built-in 1280*1080-pixel camera ensures clear imaging, auto focus, and one-touch recording.



Abundant accessories

It is equipped with matching surgical channels for various keyhole surgeries. Optional sheath stabilizers and other accessories meet diverse craniocerebral minimally invasive surgeries.



Flexible endoscopic body

The imaging catheter can be shaped according to clinical needs, fulfilling special surgical requirements.



Safe and portable

The product is lightweight and safe, weighing less than 10g, reducing surgeons' hand fatigue, and realizing single-hand operation.

Product composition

Main components

Visual puncture and exploration catheter



Retractor for keyhole surgery



Malleable imaging catheter

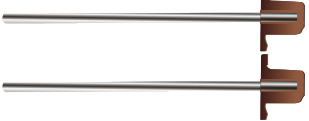


Other supporting tools

Puncture sheath



Split-type sheath

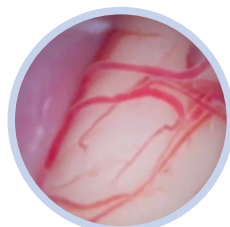


Negative pressure suction stabilizer



Main clinical applications

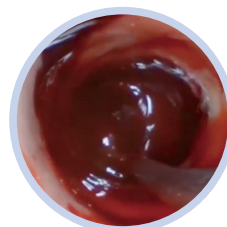
+ Fully visualized intracranial hematoma evacuation (small skull window)



Visual hematoma puncture



Guided channel establishment



Endoscopic hematoma evacuation

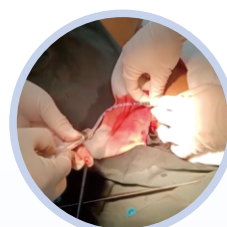
+ Endoscopic cerebral hematoma drainage (combined soft and hard channels)



Visual hematoma puncture (matched with puncture sheath)

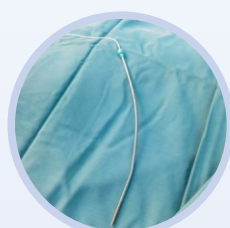


Hematoma aspiration and decompression via hard channel

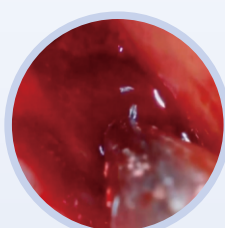


Guided catheter drainage

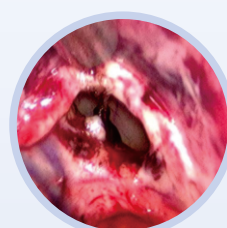
+ Subdural (or epidural) hematoma evacuation



Adjust catheter curvature



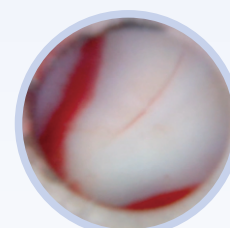
Endoscopic hematoma evacuation



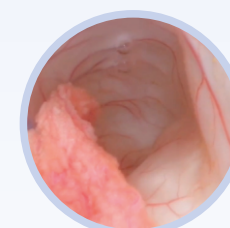
Exploration of residual hematoma

Main clinical applications

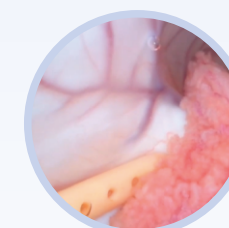
+ VP drainage for hydrocephalus



Visual ventricular puncture (matched with puncture sheath)



Intraventricular imaging



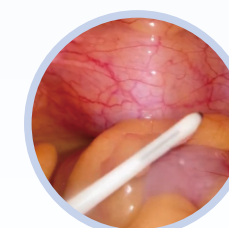
Endoscopic accuracy catheter placement



Visual enterocoelia puncture (matched with split-type sheath)

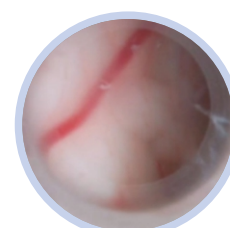


Visual exploration of enterocoelia

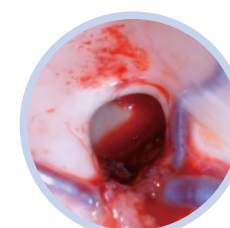


Guided catheter placement

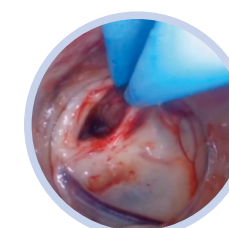
+ Third ventriculostomy



Visual ventricular puncture (matched with large-channel working sheath)



Intraventricular exploration



Endoscopic ventriculostomy

Containing a disposable lens, it is used in conjunction with the neuroendoscopic imaging system, connected to tablet, computer, or mobile phone, and operated independently.

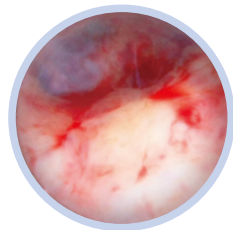
By installing the “electronic endoscopic image processing system” software of Kezhong Medical, the disposable tissue retraction and dilation catheter can transmit real-time images to various display terminals such as mobile phone, tablet, or medical workstation.

Learn about installation steps

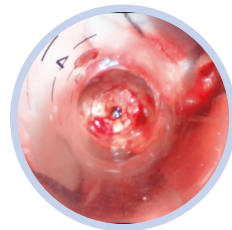


Scan the QR code

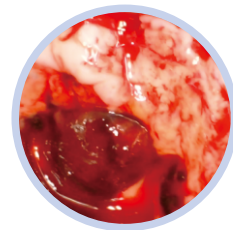
Specification/model	Imaging catheter parameters	Visual guiding catheter parameters	Retractor parameters	Obturator
QK I	Unavailable	Unavailable	13070: Φ13mm/70mm 16090: Φ16mm/90mm	Available
QK II	Unavailable	Φ4.5mm/246mm	13070: Φ13mm/70mm 16090: Φ16mm/90mm	Unavailable
QKI IIIC	0°/Φ3.9mm/246mm	Φ4.5mm/246mm	08050: Φ8mm/50mm 13070: Φ13mm/70mm 16090: Φ16mm/90mm	Unavailable
QK III	0°/Φ3.9mm/246mm	Φ4.5mm/246mm	13070: Φ13mm/70mm 16090: Φ16mm/90mm	Available
QK VI	0°/Φ3.9mm/246mm	Φ4.5mm/246mm	13070: Φ13mm/70mm 16090: Φ16mm/90mm	Available

Main clinical applications
+ Tumor exploration (meningioma, hemangioma)


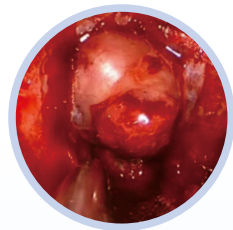
Visualized puncture and exploration



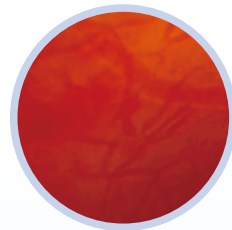
Guided channel establishment



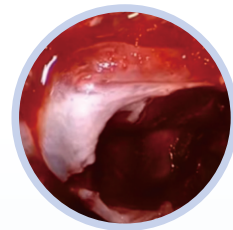
Endoscopic resection

+ Tumor margin exploration (pituitary adenoma, glioma)


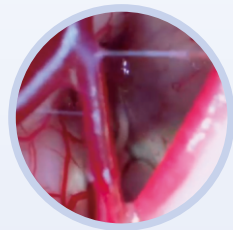
Tumor exposure



Contact observation of epithelial vessels



Precise resection of tumor tissues

+ Other surgical applications


Exploration of blind zones under microscope



Robotic visual puncture



Stereotactic visual puncture