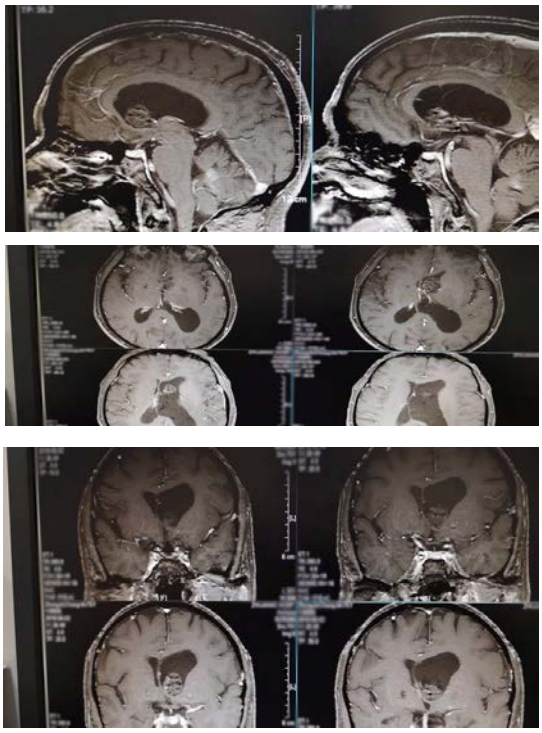
Application of Balloon retractor under the rection of The brain tumor under the microscope visualisation

A 75-year-old male patient from Meizhou city, Guangdong province, with a history of hypertension, was admitted to the department of neurosurgery, Zhujiang Hospital on 31st May 2018 because of a lesion stays in left ventricular.

Clinical preliminary diagnosis: left ventricle space occupying lesion

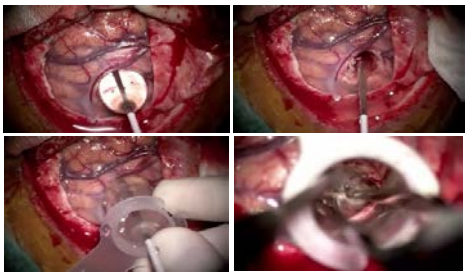


Preoperative MRI revealed a space occupying lesion, about 2 x 2cm, in the lateral ventricle.

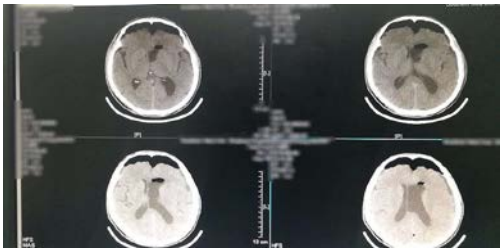
Using CCC to create surgical corridor and resect the tumor lesion under microscope.

B-mode ultrasound was used to locate the balloon and the lesion

It takes half an hour from brain tissue exposed until the tube been taken out.



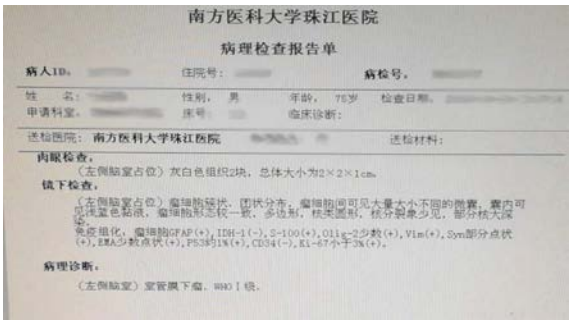
The balloon slowly and softly dilates the brain tissue and creates the corridor, the tube remains the corridor and provides a stable and visible operation path, also protects the surrounding brain tissue from accidental injury by the surgical instruments.



Postoperative CT revealed that the operation corridor was closed.

The patient regained consciousness and able to communicate after the surgery.

Postoperative pathological diagnosis: Left ventricle Subependymoma, WHO I grade



南方医科大学珠江医院

病理检查报告单

Advantages of CCC

- Corridor is created by physical compression, the possibilities of bleeding and surgical injury are much more less.
- Transparent tube keeps the operation view clean and clear, no need to flushing too often
- Transparent tube walls makes the surrounding tissue visible, doctors can move adjust the tube's position to better observe the lesions and bleeding
- Minimal invasive retractor leads to less complication, less operation time and hospitalization time, and better postoperative recovery.