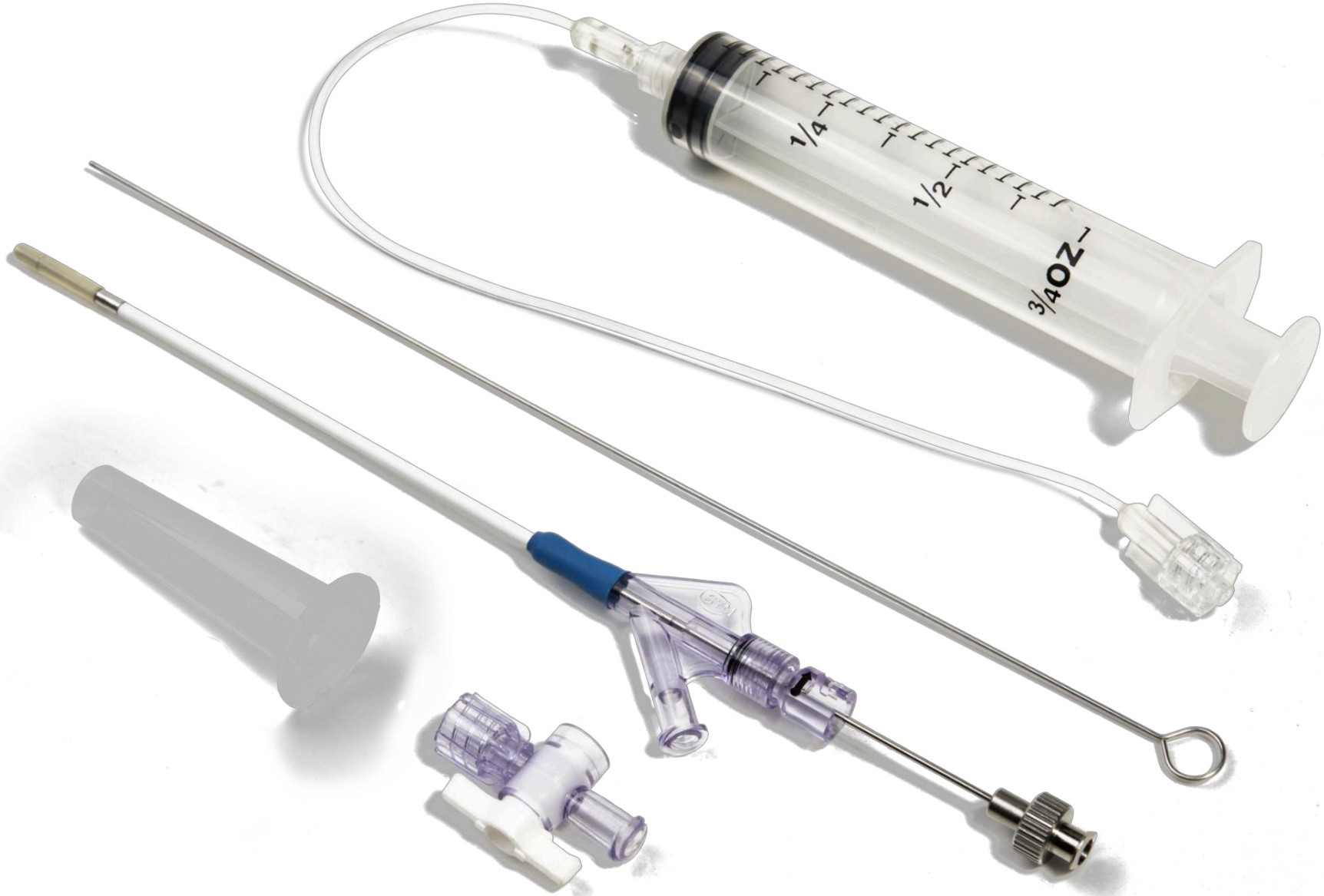
Cerebral Corridor Creator

Product introduction and instruction of use

AUG. 2019 SYM MEDICAL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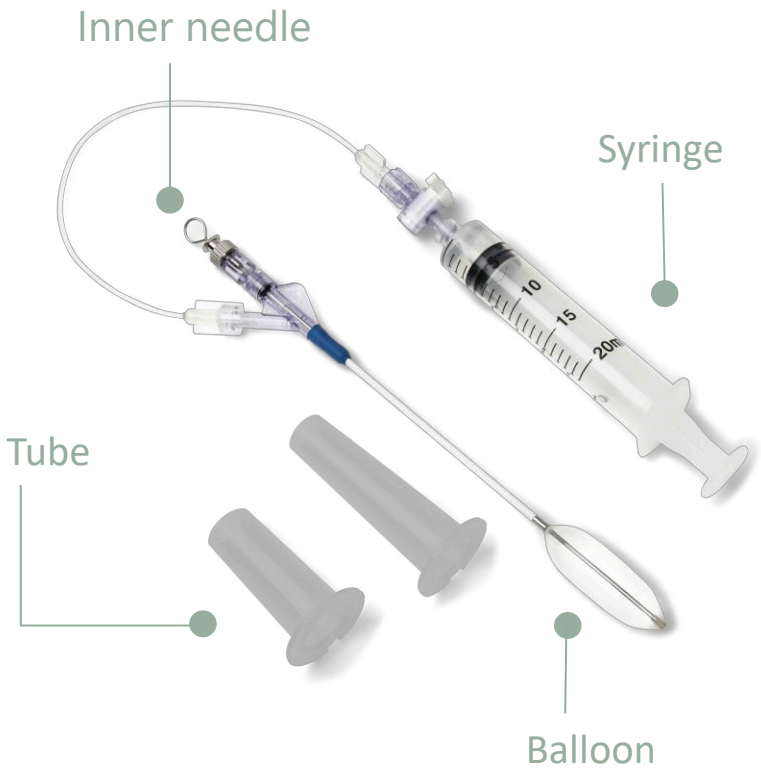
Cerebral Corridor Creator



Indication:

- ✓ Deep brain space occupying lesion:
  - Small to Medium Lesion
  - Diameter less than 30mm
- ✓ Hypertensive intracerebral hemorrhage

Cerebral Corridor Creator

Part number:

Tube Model	Inner Diameter (mm)	Length (mm)
YB - 50	15 mm	50 mm
YB - 70	13 mm	70 mm

Corresponding size of balloon will be provided with the tube.

Accessory - metal handle

Key advantages of CCC

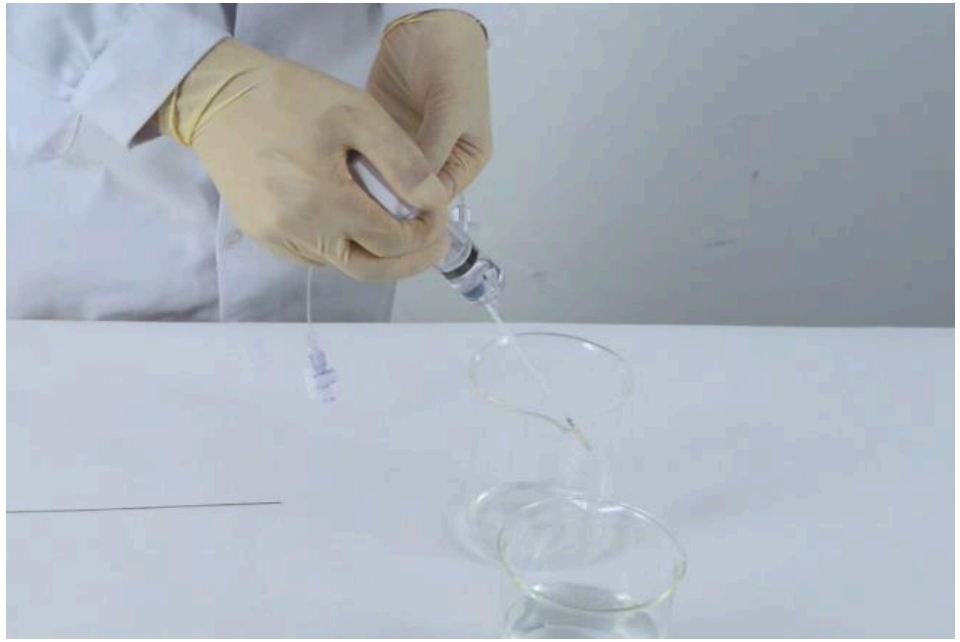
"A tubular brain retractor for minimal invasive brain surgery."

- ✓ Unique concept of balloon compression;
- ✓ Minimizes the increase of the intracranial pressure;
- ✓ Minimizes the amount of brain injury compared to the traditional retractor;
- ✓ Less chance of bleeding;
- ✓ A clearly visible operation view for observation;
- ✓ Prevent the secondary damage and avoid fausse route or second trajectory;
- ✓ Avoid brain tissue collapse.

Instruction of using Cerebral Corridor Creator (pre-operation & operation)

Preoperative preparation

1. Flushing the balloon and the tube

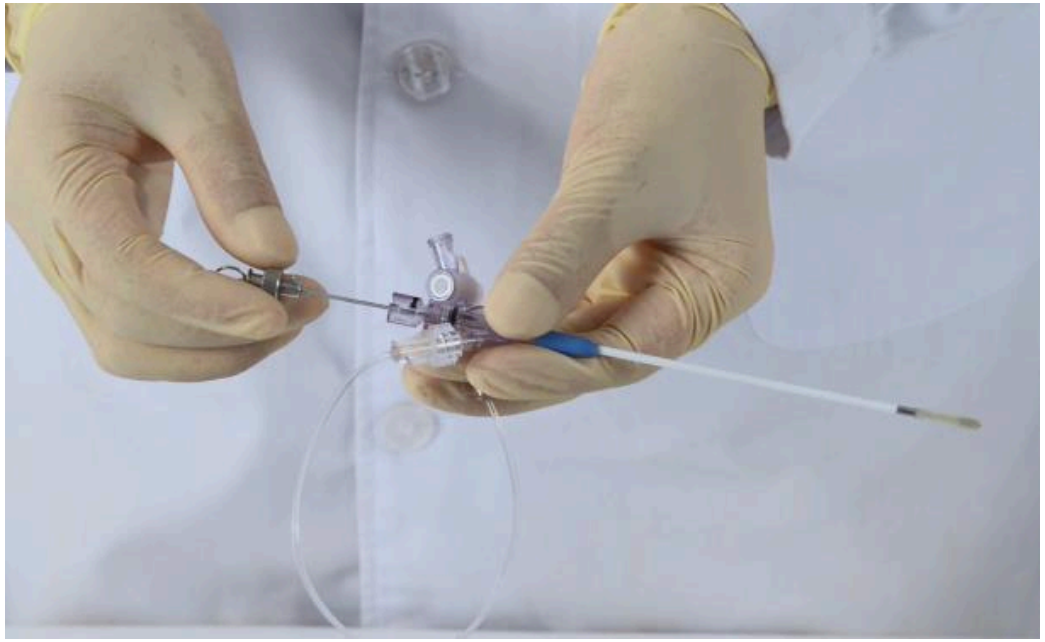


NOTE: take the inner needle out from the inner tube and flushing both.

Preoperative preparation

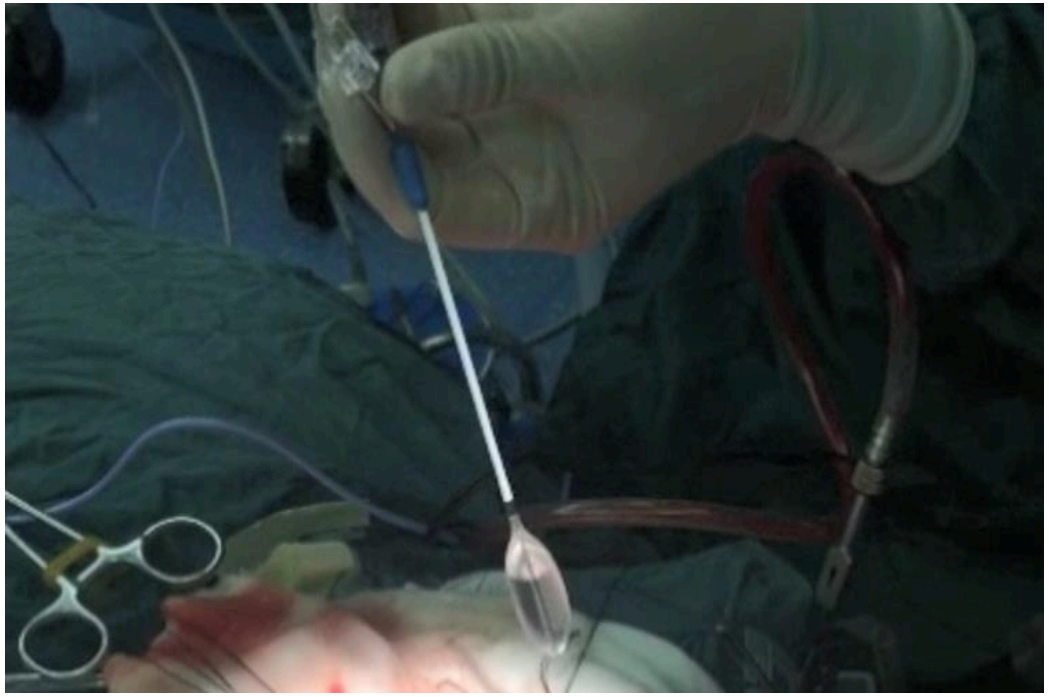
2. Stretching the balloon

NOTE: The balloon **MUST** be stretched before use.



Preoperative preparation

3. Exhausting the air from the balloon



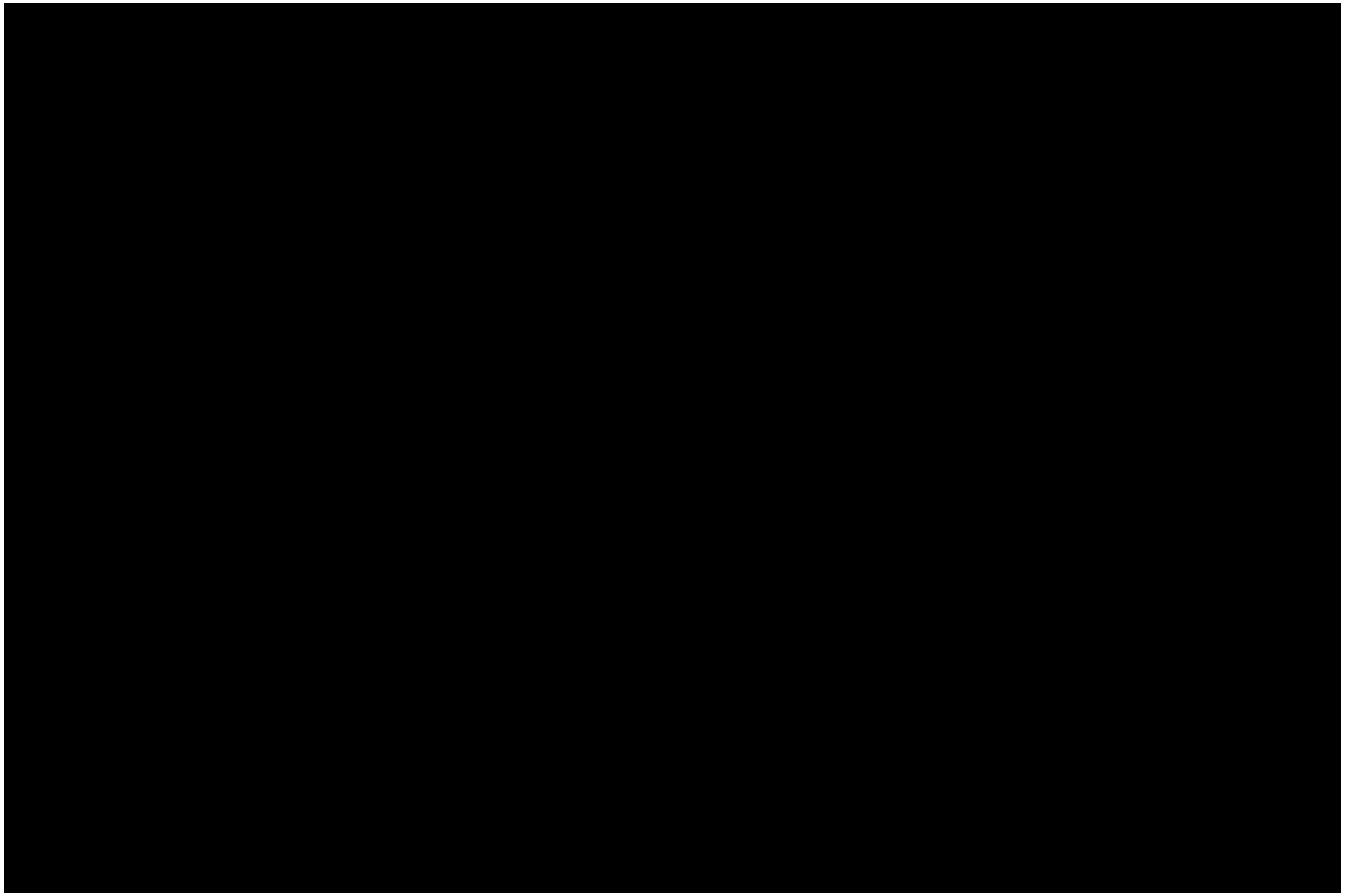
NOTE:

- Connect the syringe with the balloon catheter by the connection tube.
- Place the balloon at lower place and Syringe at higher place, so the air go to high place and easier to be take out.
- Inject in and draw out the saline together with the air till all air in the balloon has exhausted.

Preoperative preparation

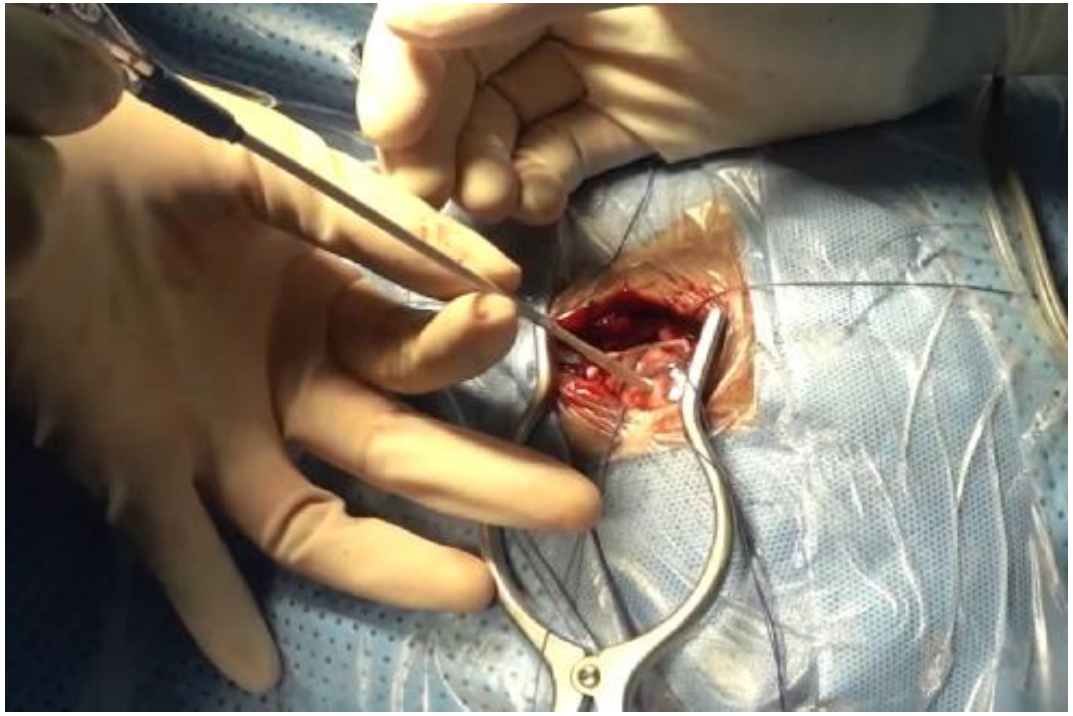
4. Connect the metal handle with the tube

Operation - Case 1 (HICH)



Operation - Case 1 (HICH)

1. Insert the balloon catheter



NOTE:

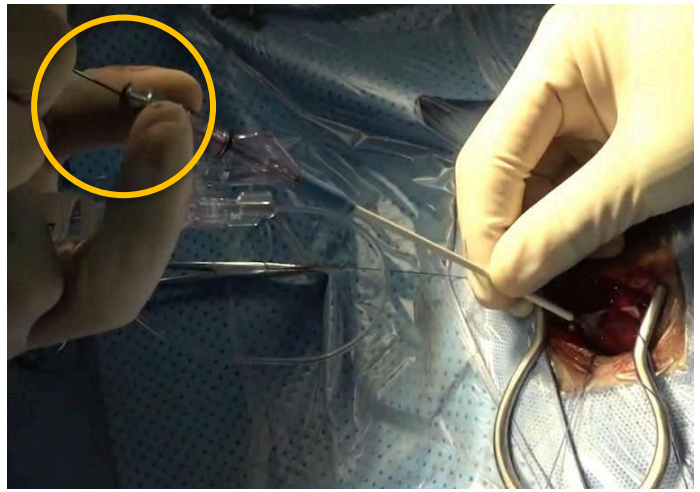
- Puncture the balloon catheter to the lesion area.

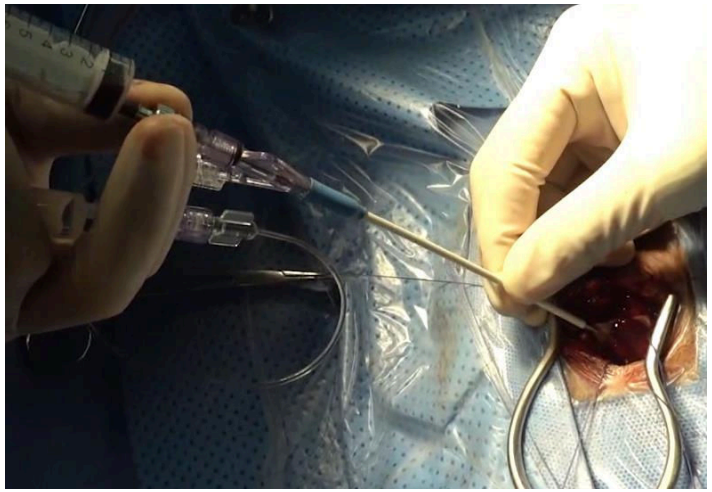
- Surgeons could use navigation system or stereotactic frame to position the lesion place during operations.

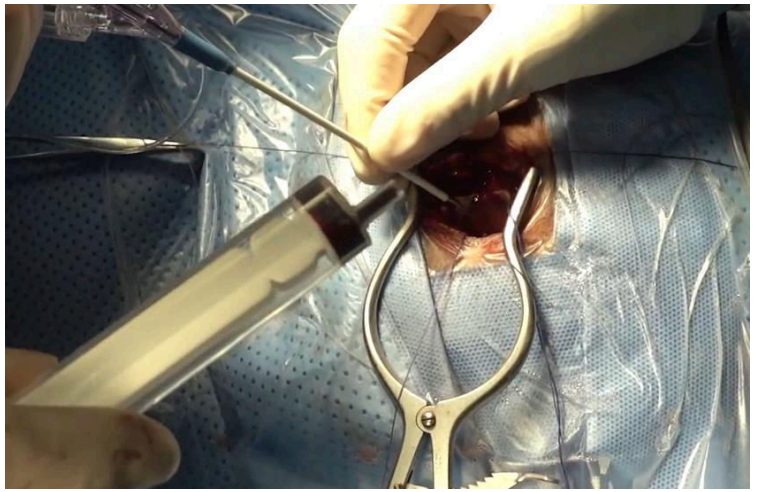
Operation - Case 1 (HICH)

1.5. Check the lesion location

(If use any position method can make sure the balloon is set in place, this step can be omitted.)





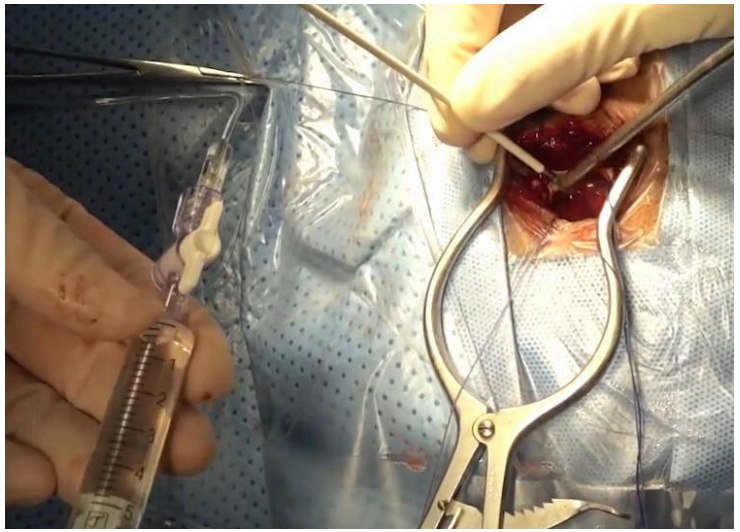


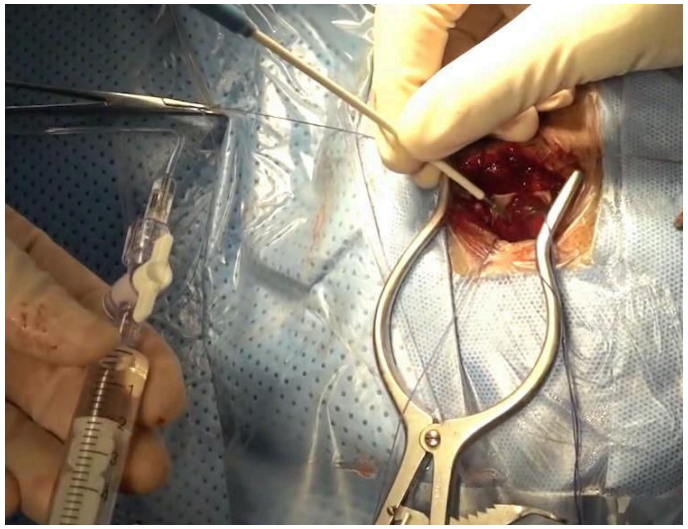
NOTE:

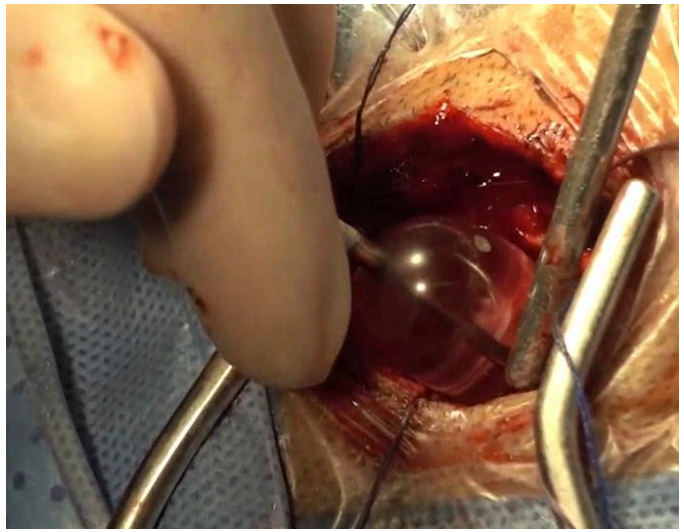
- After balloon is in place, take out the inner needle from the inner tube, and connect with a syringe.
- Slowly pump out the liquid from the brain. This can help to check the position and reduce the ICP.
  - In HICH case, the liquid should be black (wasted) blood; In occupying lesion case, it can be CSF. (**CAUTION**: if there is resistance, maybe the balloon isn't set in the right place, so the brain tissue is stuck at the balloon tip. Adjust the balloon and pump again.)

Operation - Case 1 (HICH)

2. Create a surgical corridor





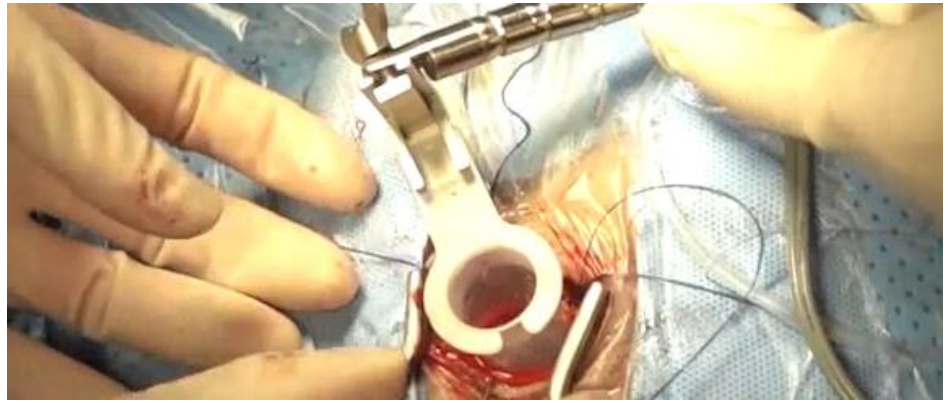


NOTE:

- Gradually inflate and deflate the balloon multiple times to create a surgical corridor.
- It is recommended to stop the three-way cock and leave the inflated balloon in brain tissue for a while. So the tissue can be dilated sufficiently.

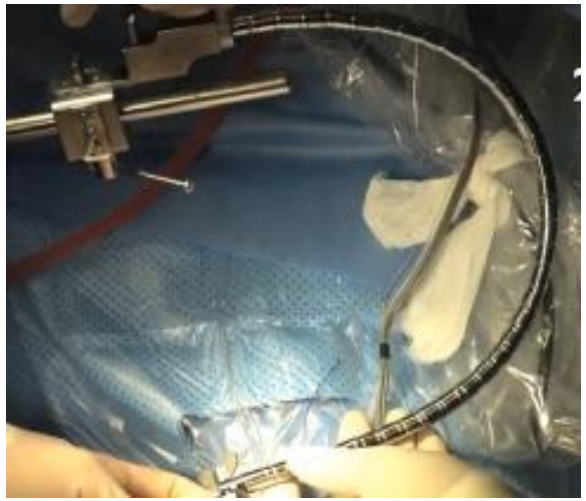
Case 1 - Intraoperative

3. Place the transparent tube in place



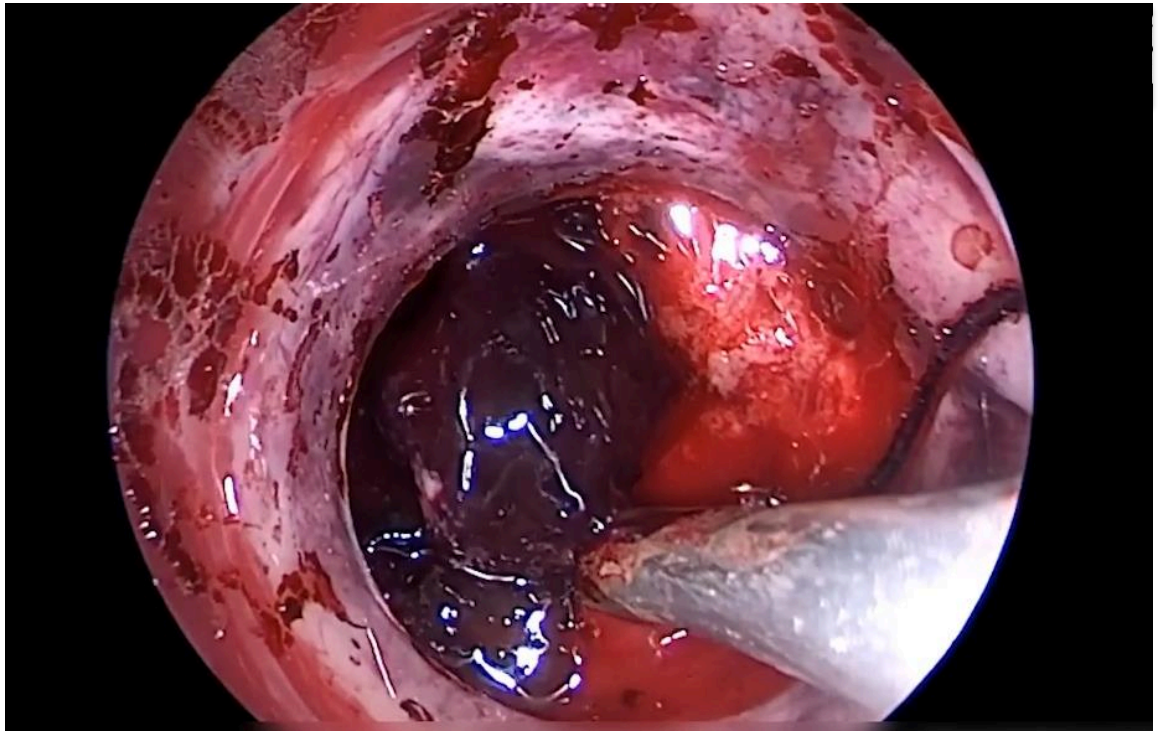
NOTE:

- Place the tube with the help of balloon
- Fix the tube by connect the metal handle with any fixation system.



Case 1 - Intraoperative

4. Hematoma evacuation



NOTE:

- Evacuation under a clear view of blood clot and surrounding tissue.
- Slowly withdraw the tubular retractor after the evacuation and hemostasis finished.

Thank you.