

Microscopic Transsphenoidal Surgery / Endoscopic Endonasal Surgery for Tumour Excision or CSF repair **顯微鏡經蝶竇手術 / 內鏡經鼻手術切除腫瘤或修補腦脊液滲漏**

Side

Midline via sublabial route or nostril (minimally invasive approach)

Purposes of surgery

- To establish definitive histological diagnosis
- Tumour resection
- Decompression of optic nerve or other cranial nerves
- Control hypersecretion of hormones
- To repair CSF leakage

The procedure

- General anaesthesia with usual operative duration of 3-6 hours
- May involve deviation or resection of nasal septum
- May utilize computerized image guidance
- Microscope or endoscope is usually used for visualization
- May require harvesting fat or fascial graft from other parts of the body for reconstruction of skull base
- May require intra-operative or post-operative lumbar CSF drainage

Preparation before surgery

- Inform doctor for any symptoms of suspected upper respiratory tract infection (e.g. blocked and watery nose)
- Continue the hormonal replacement therapy as prescribed by doctor

Risks and complications

- Vascular injury including hemorrhage or infarction (from the tumour, venous sinuses, internal carotid artery injury, pseudoaneurysm)
- CSF leak and infection (meningitis, pneumocephaly)
- Hormonal insufficiency (cortisol, thyroxine, sex hormones, growth hormone)
- Diabetes insipidus
- Deterioration of vision/blindness
- Diplopia

- Other cranial nerves deficits
- Sinusitis
- Numbness of upper teeth
- Anosmia
- Perforation of nasal septum
- Nasal obstruction
- Mortality if severe complications occur
- Risks depend on nature of lesion and extent of excision

Care after the procedure

- Post-operatively may require temporary packing of nose
- May require bed rest
- Avoid sneezing and picking of nose
- Avoid head in dependent position
- May need nasal irrigation and repeat nasoscopic examination

Follow up

- CT/MRI scan performed for post-operative assessment
- Management of hormonal dysfunction
- Inform doctor for continuous clear nasal discharge, persistent thirst with increase in urination

Management plan / anticipated outcome

- Adjuvant treatment include Radiotherapy/Stereotactic Radiosurgery/Hormonal Replacement Therapy
- In cases of residual or recurrent tumor, your doctor will advise if adjuvant treatment or reoperation is needed after assessment

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your doctor.