

## **Microscopic Transsphenoidal Surgery / Endoscopic Endonasal Surgery for Tumour Excision or CSF repair** **經蝶竇/鼻竇手術**

### **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
- Usually computerized image guidance is required
- Microscope or endoscope is usually employed in the procedure
- May require fat or fascial graft
- May require intra-operative or post-operative lumbar CSF drainage

### **Preparation before surgery**

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

### **Risk and complication**

- Vascular injury include 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

- Risk depend on nature of lesion and extent of excision
- Sinusitis
- Numbness of upper teeth
- Anosmia
- Perforation of nasal septum
- Nasal obstruction
- Mortality if severe complication occurs

### **Care after the procedure**

- Post-operatively may require 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**

- Probable residual tumour: with recurrence (requiring adjuvant treatment or reoperation)
- Adjuvant treatment include Radiotherapy/Stereotactic Radiosurgery/Hormonal therapy

### **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.