

## Introduction

This operation removes pathology in ethmoid and frontal sinus through an external approach and is indicated in the following conditions, though there is a chance of incomplete relief of symptoms and recurrence.

## Indications

1. Acute / chronic sinusitis.
2. Nasal Polyposis.
3. Tumours.
4. Mucocele.
5. Osteoma.
6. Provide of access to : ethmoidal artery, orbit content, skull base, pituitary gland.

## The Operation / Procedure

1. Incision is made in the face in the groove between the eye and the nose.
2. Open the diseased sinuses.
3. Remove diseased sinuses tissues.
4. Close the wound with a drain tube in place.

## Preoperative Preparation

1. Admit 1 day before or on same day of this “elective” operation.
2. Anaesthetic assessment before operation. Inform your doctors about drug allergy, any medical condition e.g. diabetes mellitus, heart disease, hypertension and any regular medication, including herbs and dietary supplement.
3. Keep fast for 6 to 8 hours before operation.
4. Empty bladder and change to operation clothes before transfer to operating room.
5. Pre-medication, antibiotic prophylaxis intravenous line may be required.

## Postoperative Instruction

### A. General

1. Mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over the operation site. Inform nurse or doctor if pain severe.
3. Nausea or vomiting are common; inform nurses if symptoms severe.
4. Inform nurses if more analgesics are required.

### B. Wound care

1. May need analgesic for pain or discomfort after the procedure.
2. Sleep in slightly head up position may help reduce postoperative oedema.
3. Do not blow nose.

### C. Diet

Resume diet, usually 4 hours after anaesthesia, and when taking sips of water well.

**Common Risks and Complications** (not all possible complications are listed)**A. Anesthesia related complications**

1. Cardiovascular : myocardial infarction or ischaemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
2. Respiratory : atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease.
3. Allergic reaction and shock.
4. Toxicity of local anaesthetic may result in serious complication although rare.

**B. Procedure related complications****Common Risks and Complications ( $\geq 1\%$  risk)**

1. Nasal bleeding.
2. Infection.
3. Synechia.
4. Webbing of incision.
5. Paresthesia.
6. Recurrence of the disease.

**Uncommon Risks with Serious Consequences ( $< 1\%$  risk)**

1. Severe bleeding due to injury of internal carotid artery, anterior and posterior ethmoidal arteries.
2. Fistula formation.
3. Eye injury including bruising, emphysema, orbital haematoma / abscess, visual loss, diplopia.
4. Intra-cranial injury including CSF leak, meningitis, brain abscess, pneumocephalocele.
5. Nasolacrimal duct injury leading to epiphora.
6. Transient or permanent loss of smell sensation.
7. Frontonasal stenosis.
8. Death due to serious complications.
9. Mucocele.

**Conditions that Would Not be Benefited by the Procedure**

Nasal disease not attributed by the Frontal / Ethmoidal sinus.

**Consequences of No Treatment**

Persistent or progression of nasal symptoms or complication of sinusitis.

**Things to take on discharge**

1. Contact your doctor or a nearby Accident & Emergency Department if you find increasing discharge, pain and or redness around the wound.
2. Take analgesics prescribed by your doctor if required.
3. Usually resume normal activity about 1 to 2 weeks after the procedure.

**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. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

**Reference**

Hospital Authority : "Open Nasal and Sinus Surgery" (2023)

Smart Patient: [https://www.ekg.org.hk/pilic/public/ENT\\_PILIC/ENT\\_OpenNasalandSinusSurgery\\_0331\\_engchi.pdf](https://www.ekg.org.hk/pilic/public/ENT_PILIC/ENT_OpenNasalandSinusSurgery_0331_engchi.pdf) (24-07-2023)