

Introduction

This operation accesses the maxillary sinus through facial bone to treat pathologies in its immediate neighbouring area, such as:

1. Chronic maxillary sinusitis
2. Antral-choanal polyp
3. Sinonasal tumour
4. Ligation of the maxillary artery (Epistaxis)
5. Orbit fracture
6. Exophthalmos
7. Oral-antral fistula

The Operation / Procedure

1. Make a small incision between the upper lip and gum, then enter the maxillary sinus by removing a small piece of bone from the anterior wall.
2. Remove diseased mucosa of the maxillary sinus, and make a small hole draining into the nasal cavity.
3. Apply nasal pack for haemostatic control before closing the gum wound.

Preoperative Preparation

1. Admit 1 day before or on same day of this “elective” operation
2. Anaesthetic assessment. **Inform your doctors** about drug allergy, regular medications or other medical conditions, 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.
5. Can mobilize and get out of bed 6 hours after operation.

B. Wound care

1. May need analgesic for postoperative pain or discomfort.
2. Facial swelling.
3. Mild transient epistaxis may occur, please attend the nearby emergency department if bleeding persists.
4. Sleep in slightly head up position may help reduce postoperative oedema.
5. 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

Facial pain and numbness due to infraorbital nerve injury	Gingivolabial scar affecting denture fitting	Gum and teeth numbness
Facial swelling, haematoma	Dental root injury	Recurrence of disease

Uncommon Risks with Serious Consequences

Intra-orbital injury leading to blindness and diplopia	Nasolacrimal duct injury
Oral-antral fistulation	Mucocele
Facial deformity and maxillary antrum hypoplasia	

Alternative Treatment

1. Functional Endoscopic Sinus Surgery (FESS).
2. Other external approach.
3. Drug treatment with antibiotics or steroid.

Conditions that would not be benefited by the Procedure

Malignant sinonasal tumour.

Consequences of No Treatment

1. Progression of disease.
2. Recurrence of disease.

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. After the procedure, avoid rigorous exercise or contact sports for few weeks.

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: "Caldwell-Luc operation (Sublabial Antrostomy)" (2023)

Smart Patient: http://www.ekg.org.hk/pilic/public/ENT_PILIC/ENT_CaldwellLucOperation_SublabialAntrostomy_0135_engchi.pdf (06-07-2023)