A. General Information

1. Introduction

What is FESS?

Functional Endoscopic Sinus Surgery or FESS is an operation performed through the nose to treat diseases such as sinusitis and nasal polyps that cause inflammation or infection of the nasal cavity and paranasal sinuses. The aim of the surgery is to improve ventilation and normal drainage of the paranasal sinuses. The surgeon will use a small telescope called an endoscope and special small instruments to access and operate on the sinuses via the nostrils. There will be no cuts or stitches on the face.

Why do I need FESS?

FESS is usually advised for patients who have recurrent or chronic sinus infections caused by blockages to the normal passage of the sinuses leading to symptoms such as nose block, discoloured nasal discharge and facial pain or heaviness despite treated by maximal medical therapy. Maximal medical therapy usually includes steroid nasal sprays, antibiotics, nasal decongestants, nasal irrigation and/or allergy treatment over a period of weeks to months. Occasionally, FESS is indicated in patients with acute and serious complications of sinusitis which has involved the eye or brain.

2. What are the advantages of FESS?

FESS is a minimally invasive operation that helps to treat recurrent sinus disease that is refractory to medications. It is deemed effective in most operated patients in reducing the symptoms of disease and improving quality of life. Recovery from the surgery is usually short and uneventful.
3. **Risks of surgery**

The surgery is usually very safe and uncomplicated. However it is important that patients are aware of the risks of the operation.

**Bleeding** – It is common for small amounts of bleeding to occur following the first few days of operation. Major bleeding requiring further intervention is extremely rare.

**Damage to the Orbit / Eye** - The sinuses and the eye are only separated by a thin layer of bone and this is rarely damaged during the operation. If it happens, bleeding or infection of the eye could lead to double vision, pain, swelling around the eye and even loss of vision. Serious complications of the eye will be assessed by an ophthalmologist and further operations may be required.

**Damage to the floor of the brain** – This is a rare complication that will result in a leakage of cerebrospinal fluid (CSF) into the nasal cavity. Hospital stay may be prolonged or an operation to repair the leak may be required. In even rare circumstances, bacteria could travel up to the brain through the defect leading to infection causing headache, fever and neck stiffness. This is usually treated with antibiotics and surgical repair.

4. **Other options if surgery is declined**

FESS is only an option for the treatment of sinusitis. It is considered very safe compared to other available surgical options which usually involves incisions or cuts on the face or mouth. Other treatment options for sinusitis include continuation of medical therapy such as steroid nasal sprays and antibiotics.

B. **Before the surgery**

1. **Pre-admission clinic procedures**

You will have been reviewed by your surgeon in-charge and this will include discussing about the operation, indications and risks involved. A pre-op computed tomography scan (CT scan) is mandatory prior to FESS. You may be referred to the anaesthetic clinic pre-op

   a. Details on your health – Any particular health conditions or illnesses should be disclosed to the doctor e.g. current or past medical illness, past surgical history
   b. Medications – you should provide a list of your regular medications to the doctor including any allergies or traditional medications

2. **Preparing for admission**
a. Advices prior to admission – Please ensure that you follow any advice from your doctor before admission. Some might advise you to complete a course of oral antibiotics or steroids prior to the operation to reduce the risk of bleeding during the operation.
b. Medications – Your doctor will have told you to stop any blood thinning medications prior to operation (e.g. aspirin – up to 1 week before operation)

3. Arrival to UMMC

On the day of admission, you will need to register at admission counter Level 1, Menara Selatan (South Tower), UMMC. You will then be directed to the relevant ward.

C. Operation

Anesthesia: Refer anesthesia leaflet

The operation is usually done under general anaesthesia and will take about 1 to 2 hours depending on the complexity of the case. The operation involves unblocking the sinuses by removal of small pieces of bone and mucosal lining. This is all done inside the nose through the usage of endoscopes and special instruments. There will be no cuts or incisions on the face.

D. After the operation

Immediately after the operation you may feel your nose is blocked with some pain. This may be due to nasal packing which helps to control bleeding. Nasal packs are usually removed a day after operation. You might feel uncomfortable upon removal of the pack. This is followed by bleeding which settles after a few minutes with ice compression. After removal of the pack, your nose might still be blocked by small amount of blood clots, mucous and crusting. This blocked sensation could last up to two weeks after the operation. Frequent nasal rinse with salt water helps to loosen the crusts and improve nasal hygiene.

Discharge from the ward is usually done a day or two after the operation. Discharge medications include pain medications, nasal rinse and antibiotics. Medications should be taken as prescribed and nasal rinse should be done at least 3 times a day. You will need to rest at home for at least a week and avoid any heavy lifting or carrying. A follow up clinic appointment will be given on discharge, which is a week after the operation. On the follow up visit, the nose will be inspected and cleaned from crusts, clots or mucous to prevent infection and recurrent sinus disease. Complete healing process will take up to 6 weeks from the time of surgery.

Complications to watch out at home:

- Excessive bleeding from the nose
• Fever with headache and neck stiffness
• Double vision or reduced visual acuity
• Swelling or pain around the eye
• Clear fluid discharge from the nose

E. Commonly asked questions

Is the operation painful?

It is common that the nose will be blocked with minimal pain up to two weeks after the operation. This is usually controlled with simple painkillers and medications. Severe uncontrolled nasal or facial pain post-op requires urgent assessment.

Can I blow my nose after the operation?

Blowing the nose after the operation should be avoided. It is common to expect blood stained mucous, small clots and crusts coming out from the nose within the healing process which can take up to 6 weeks. Nasal rinsing with salt water is highly advisable to facilitate the removal of the crusts during subsequent clinic visits post-op.

F. Useful contact numbers

ENT Clinic

ENT On-call team