



Functional Endoscopic Sinus Surgery (FESS)



Changi
General Hospital

SingHealth

What is FESS?

FESS stands for Functional Endoscopic Sinus Surgery. It is a minimally invasive surgery of the nose and paranasal sinuses (*Fig 1a*) and is performed under general anaesthesia (with the patient completely asleep). The operation is done through the nose, using an endoscope, which is a special lighted tube that enables the surgeon to view the nose and sinus cavities as surgery is performed (*Fig 1b*). There are no external incisions on the face. During surgery, blocked sinuses are opened to facilitate drainage of the mucous from the sinuses. Quite often, a septoplasty (procedure to straighten the septum (bony-cartilaginous partition between the left and right nasal cavities)) may also be performed to allow access to the sinus cavities.

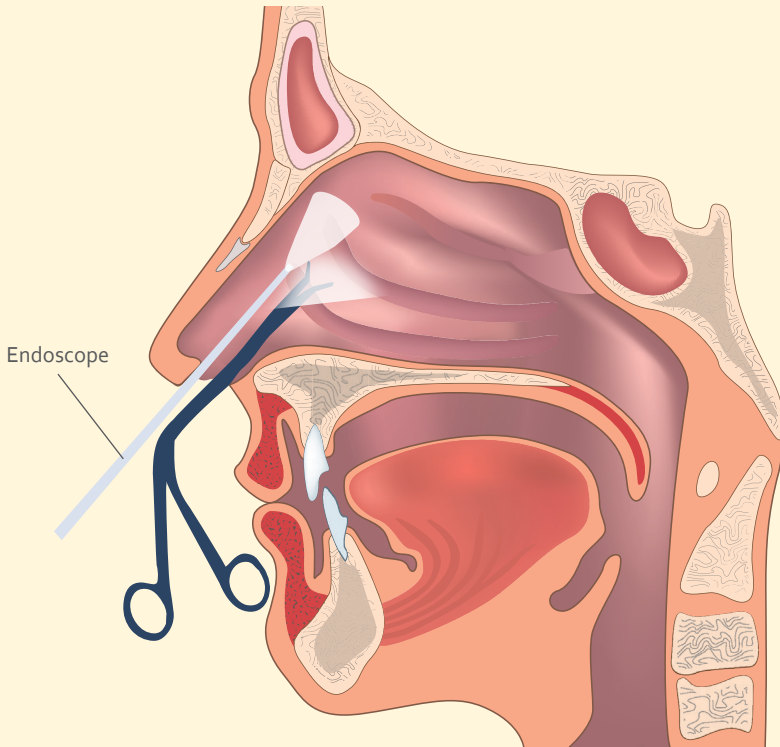


Fig 1a) Concept of FESS - visualisation and surgery through the endoscope and instruments through the nostrils



Fig 1b) Photograph of FESS being performed in the operating theatre

When do I need FESS?

Your ENT surgeon may recommend FESS if you have:

1. Rhinosinusitis that has not responded to medical management
2. Recurrent rhinosinusitis

What are the risks of FESS?

The risks of FESS can be divided into major and minor complications. Major complications include injuries to the brain, eye and large blood vessels although these complications are very rare (much less than 1%). Minor complications include scar bands in the sinuses, minor bleeding and bruising or swelling around the eye. Patients with nasal polyps have a higher risk of recurrence of the disease. However, an appropriate combination of FESS and long term medical treatment can reduce the risk of recurrence of polyps after surgery. Hence, it is important for such patients to be followed up regularly by their surgeon.

With the availability of image guidance system (IGS) during sinus surgery, the risks of major complications is significantly reduced. Using IGS, the surgeon is able to confirm the position of the operating instruments in relation to critical structures such as the eye, brain or major blood vessels. This is particularly important in revision FESS (re-do sinus operation) whereby there may be a lot of scarring and distortion of important surgical landmarks from the previous surgery/s.

How long is the recovery period?

After sinus surgery, the surgeon will usually place dressings in the sinus cavities to prevent post-operative adhesions and to minimise bleeding. These dressings may be absorbable (which do not require removal) or non-absorbable (which will usually be removed between 5 - 10 days after surgery). Some surgeons routinely place additional dressings in the nasal cavity ("nasal packs") to minimise bleeding after surgery. These "nasal packs" are usually removed in 1 - 2 days. Depending on the extent of the sinus operation, the patient may be allowed to go home on the same day (as a Day Surgery Procedure) or may be admitted to the ward and observed overnight. It is common for patients to feel blocked in the nose from the packing material and blood clots. A nasal gauze ("bolster") will be placed under the nose to collect any blood that drips out (*Fig 2*). This is usually removed before the patient goes home. There may be mild pain after the surgery but this is usually well-controlled with pain relievers.

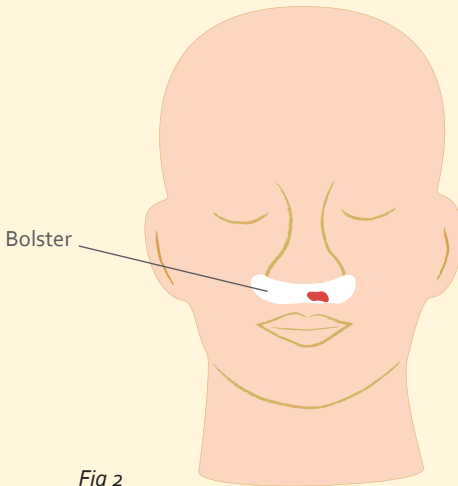


Fig 2

Patients are instructed to wash his / her nose with specially prepared salt solution (nasal irrigation or “douche”) 2 - 3 times a day. This is very important in keeping the sinuses clean and moist, thereby helping to speed up healing and recovery of sinus function. Nasal irrigation is continued for at least several weeks after surgery and patients will be advised on how long to continue on this by their surgeon.

In the first clinic visit (usually between 5 - 10 days after surgery), the packing materials will be removed (if non-absorbable) or suctioned out (if absorbable). The surgeon will clean up the sinus cavities with the aid of an endoscope and suction. Following this, most patients will feel much better. The patient should be able to return to work 1 - 2 weeks after sinus surgery. The full recovery of the sinuses may take up to 3 months although most patients will feel well enough to conduct their normal daily activities after 1 - 2 weeks.

Are there any food restrictions after FESS?

No.

When can I resume heavy physical activity?

As the healing process varies from person to person, it is generally advised that patients avoid any heavy physical activity (e.g. weight lifting, intense aerobic exercises) for at least a month after the surgery.



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8.30 am to 12.30 pm (Saturday)
Closed on Sunday & Public Holiday

For more information, please visit www.cgh.com.sg

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Information is valid as of January 2021 and subject to revision without prior notice.

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