# CHRONIC RHINOSINUSITIS AND FUNCTIONAL ENDOSCOPIC SINUS SURGERY (FESS)

This information leaflet is to support your decision with your Specialist.

This leaflet will explain where the sinuses are and what surgery can be offered for conditions affecting them. Before you agree to any treatment, you will always have an opportunity to discuss your procedure and raise any concerns or questions.

### WHAT ARE THE SINUSES?

The sinuses are air-containing chambers that lie close to the nasal air passages. They are found inside the bones of the face and skull. They are connected to the inside of the nose through very small openings. These small openings allow air to flow into the sinuses and mucus to drain out into the nasal passages.

The exact role of the sinuses is not known and when they are working normally we are unaware of them. If however the sinuses become blocked we become aware of infections and inflammation which cause other symptoms. Congestion (or nasal blockage), facial pain, pus-like mucus nasal discharges are all associated with sinusitis. Sinusitis is inflammation or infection affecting the sinuses. It is usually caused by blockage or obstruction to the drainage pathway of the sinuses. Typical features include a feeling of blockage of the nose, pressure or congestion around the base of the nose, mucus discharge from the nose and occasionally into the throat (catarrh). Other symptoms include facial pain, headache and reduction or loss of the sense of smell. The condition may at times be difficult to diagnose. An ENT surgeon will normally look into the nose using an endoscope (a special telescope) that allows a view of the sinus drainage pathways and any obstructions or abnormalities in these areas. Most patients find that sinusitis gets better without treatment. A treatment regime including nose drops, sprays and antibiotics may alleviate the infection. In a very small number of patients with severe sinusitis, an operation may be needed. In rare cases untreated sinusitis can develop into a serious infection that may spread to nearby structures. The eye and the base of the brain are in close proximity to the sinuses and may become involved in the infection.

# WHAT IS FESS (functional endoscopic sinus surgery)?

Endoscopic sinus surgery is the name of the range of operations that aim to deal with sinus problems using a special telescope. In the past sinus operations were done either through the nose or by making a cut (incision) in the face and mouth. Endoscope-assisted (telescope) surgery to the sinuses allows for these operations to be performed without these cuts. Most of the time medical therapy usually controls sinus symptoms. If the symptoms are frequent enough or resist medical therapy,

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sinus surgery may have a role to play. Prior to any surgery an endoscopic (special telescope) examination of the nose, together with a CT scan of the nasal sinuses, is undertaken.

### DO I HAVE TO HAVE THE OPERATION?

Endoscopic (telescope) sinus surgery is only one approach to the treatment of sinusitis. It is the safest surgical technique for dealing with the sinuses compared to the older techniques (i.e. through the nose or by incisions on the face and mouth). In some patients an operation can be avoided by using antibiotics, steroid medication and nasal treatments.

You may change your mind about the operation at any time and signing a consent form does not mean that you must proceed with the surgery.

#### **HOW IS THIS OPERATION PERFORMED?**

You may be admitted to the hospital either the night before or the morning of the surgery. A general anaesthetic is used to make you fall asleep during the whole procedure.

The operation is performed from within the nose using an endoscope (special telescope) which provides a highly magnified view of the inside of the nose. A range of instruments are used to unblock the sinuses. Small amounts of bone and soft tissue lining around the sinuses can be removed. If other structures are found to be contributing to the sinus obstruction, such as the nasal septum (partition) or turbinates (fleshy nasal tissue), these will need to be operated on first. Please refer to the advice leaflets on these procedures.

Once the operation on the sinus has been performed the area may need to have a nasal dressing (pack) inserted to help reduce the risk of bleeding. These are usually left for a short period and may be removed after a few hours, or when you are ready to be discharged from the hospital. Some nasal dressings dissolve or absorbed by the body and do not require removal, your surgeon will let you know if this is the case. The nose will still feel congested after the dressings have been removed and may feel so for the next one to two weeks. Normal nasal airflow will not resume for up to a few months after the surgery. When any dressings are removed from the nose there will be some blood-stained discharge which usually settles soon afterwards. There may however still be some blood-stained watery discharge from the nose one to two weeks after surgery.

## **HOW LONG WILL I BE IN HOSPITAL?**

You are normally allowed to go home on the day of surgery (Day Care Surgery) or if you had an operation in the evening, the following morning. You should rest at home for at least one week. If you are involved in strenuous activity, straining or heavy

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lifting as a part of your work you must avoid this for the next three weeks. You are strongly advised against nose blowing for at least three weeks to allow the lining of the sinuses to heal.

You will be given medication, nasal drops and/or washes to use after the surgery. You will be given instructions on how to use these after the operation.

#### POSSIBLE COMPLICATIONS

There are some risks that you need to be aware of prior to giving consent for surgery. The potential complications are uncommon. Listed below are some of the problems associated with surgery, This is not a comprehensive list of the complications associated with surgery but does cover most problems including rare ones associated with this procedure. If you wish to discuss further specific issues, please do not hesitate to do so with your specialist.

# Bleeding

Rarely, if excessive bleeding occurs during surgery the procedure may have to be abandoned. Uncommonly, bleeding after surgery may require nasal packing and a further stay in hospital. This may also occur as a result of infection if you have been discharged home and you may require a further stay in hospital.

## Infection

This is uncommon, but may occur within the first week of surgery. There may be an increase in facial pain, smelly or offensive nasal discharge, high temperature or fever and bleeding. You may require antibiotic treatment or need to visit your doctor or to be reviewed by the ENT surgeon quickly.

# Failure of surgery

There may be a failure to relieve all the symptoms and there may be some residual disease that requires further treatment.

The sinuses are very close to the eye and its socket. Sometimes minor bleeding can push the inside of the eye contents outward, but more often tends to cause a little bit of bruising around the eye. Sometimes the amount of bleeding may be serious causing disturbance to vision which may require treatment or surgery. Such bleeding can at times be severe, causing double-vision and very rarely loss of sight. If such a serious eye complication were to occur you would be seen by an eye specialist (Ophthalmologist) who may determine further treatment options.

# Nerve damage

You may find a temporary reduction in the sense of smell. This is very rarely a persistent problem. Blindness may very very rarely occur as a result of damage to the optic nerve.

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# **Intracranial complications**

The spinal fluid that covers the nervous tissue of the spine and the brain may be exposed and leak through the nose. This is a very rare occurrence. If it occurs at the time of surgery and is noted effective surgical treatment can be applied to minimize this leakage and allow the lining around the brain to heal. You will need to remain in hospital for a longer period to allow the area to heal before you are discharged.

# **HOW OFTEN DO COMPLICATIONS HAPPEN?**

Complications are most fortunately very uncommon or rare with endoscopic sinus surgery.

Eye complications however may occur once in every five hundred operations though this is not inclusive of visual loss which is exceptionally rare.

Cerebrospinal fluid leak (CSF) happens once in every one thousand operations but may be detected and repaired in the same operation so the risks are very small.

If there is anything you do not understand please ask the doctor for further information.