‘Tis the season of sinusitis

It is that time of year when the pollen is flying around furiously and apart from itchy eyes, sneezing and other allergies, many people are susceptible to developing sinusitis. The Kingsbury and Claremont Hospitals, which make up the Claremont Medical Village, have developed into centres of specialized excellence, committed to the advancement of health in Cape Town.

An ear, nose and throat specialist from the medical village discusses sinususes, causes of sinusitis and possible treatments.

Sinusitis and other conditions of the nasal passage are increasingly common. The environmental pollutants and natural allergens such as pollens and fungal spores outdoors and the re-circulation of poor quality air by air-conditioning indoors are often a complete assault on our nasal passages.

We all have four pairs of sinuses

Frontal sinuses: Over the eyes in the brow area
Maxillary sinuses: Inside each cheekbone
Ethmoid sinuses: Just behind the bridge of the nose and between the eyes
Sphenoid sinuses: Behind the ethmoids in the upper region of the nose and behind the eyes

What are sinuses?

Sinuses are air filled cavities in the face and head, which serve to make the facial bones lighter. Drainage of sinuses is by tiny holes called ostia, which can become blocked from swelling. This is caused by acute upper respiratory tract infections (colds or flu), allergy or environmental pollution, including cigarette smoke. Allergic rhinitis (hay fever) on the other hand, is caused by inhaled allergens such as grasses, pollens, house dust mite or cat dander. Contrary to popular belief, dairy or wheat allergy is almost never responsible.

When the ostia become blocked, they allow bacteria to proliferate, forming pus under pressure. This is what causes the acute pain.

Types and treatment:

Sinusitis can be divided into:

Acute: An acute rhino-sinusitis usually takes about 10 days to resolve completely. The symptoms are pain, congestion, purulent nasal discharge and nasal obstruction. Treatment would be with appropriate antibiotics and decongestants.

Chronic: When acute sinusitis fails to resolve completely and lasts for 3 months, it is termed chronic rhino-sinusitis. The lining of the nose and sinuses (mucosa) changes so that more mucus is produced and the ciliary transport system, which moves the mucous to the back of the nose to be swallowed, functions poorly. In addition, there is swelling of the mucosa and nasal inflammatory polyps may develop. The treatment is different, in that short courses of the anti-inflammatory, cortisone, steroid nasal sprays as well as longer courses of antibiotics are required.

What are nasal steroid sprays?

The advantage of nasal steroid sprays is that there are few side effects and there is a negligible amount of uptake by the rest of the body, so that it is safe to use for long periods, even lifelong and it is safe to use in children. It takes time to settle, as the mucosa has to return to a pre-disease state. Nasal steroids usually take about a week to begin working and need to be taken every day in order to be effective. They have revolutionized our treatment of sinusitis.

Most sinusitis can be treated with appropriate antibiotics and decongestants and a sinus-washout is almost never necessary unless the sinusitis fails to improve or complications set in.

Sinus washouts are preferably done under general anaesthetic.

When is further investigation carried out?

Should the symptoms not resolve on nasal steroids used for 3 months, it may be necessary to do a CT scan of the sinuses to see if there is any underlying narrowing or deformities causing obstruction. It is only after a CT scan that sinus surgery can be contemplated.

What does the surgery involve?

These days, sinus surgery is a lot more specific and directed towards a particular anatomical problem. Diagnostically a CT scan is used to determine which sinus is involved and needs to be aerated.

In the past, sinus surgery was performed either with the naked eye or with a microscope and often through an external excision. Endoscopic (using an operating scope in “keyhole fashion” through the nostril and operating off a TV monitor) sinus surgery is used to clear the sinuses and remove polyps or small tumours. Also known as ESS it is performed under general anaesthetic does not always require an overnight stay in hospital, the nose does not need to be packed and it only requires a couple of days off work.

Three major advancements have taken place in sinus surgery over the last 15 years:

- The major advancement is the development of the rod telescope so that it is possible to view anatomy or pathology around corners and in recesses.
- In conjunction with the endoscopes, specialists use instruments which are very fine and precise, making it possible to work on even the narrowest and smallest passages.
- The third is the opening or restoration of the blocked natural drainage pathways so that the normal physiological function of the diseased sinuses is restored. This is in strong contrast to the old fashioned way which was to create new, larger openings in the sinuses which often closed up and did not effectively drain the sinuses anyway.

At the Claremont Hospital, an investment has been made in the most technologically advanced equipment for endoscopic surgery which is used by surgeons recognized for their experience and skill in this minimally invasive surgery.

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