Reader's Forum - 16

Q. 1 How do you manage extensive Bilateral Nasal Polypii ?

A. The cause of nasal polyps has been studied and debated since they were first recognised. Even in the early days, there existed surgical and medical approaches to the problem, a situation that still exists today. The precise assessment of the probable cause and exact extent of polyps is mandatory, which helps for management and surgical planning of the case.

Nasal polyposis has to be considered as an advanced form of chronic ethmoiditis requiring surgery. For diffuse polyposis of all sinuses a complete endonasal ethmoidectomy together with the fenestration of the frontal, sphenoidal and maxillary sinuses (pansinus operation) is indicated.

In advanced multiple nasal polyps, initial clearing is generally done with unaided eye with the help of head light.

With the availability of microdebrider this initial Step can be accomplished more effectively and with minimal bleeding.

For the management of the anterior ethmoid, the frontal, maxillary and sphenoid sinuses, angled optics of 0° and 30° are utilized. Various instruments are pre-requisite such as curved cup forceps, cru cut forceps, punches and curettes to work within the cavities. I always like to reconstruct very big middle meatus opening with complete clearing of the polyps and associated necrotic cells and diseased tissues. If D.N.S. obstructs the workability, then steptoplasty has to be done.

The end result should be an open ethmoidal bowl lined by moist mucosa and having free communication with the frontal, sphenoidal and maxillary sinuses.

The middle meatus is gently packed with ointment (Betadine) soaked thin ribbon gauze for a day and cases are regularly followed up.

In diffuse polyposis a short course of systemic steroids pre operatively and post operatively is quite useful which is always followed by topical steroid sprays.

Even in extensive disease, I prefer to do FESS under L. A. because the pupillary reflexes can be monitored, patient's subjective feedback of excessive pain

sensation when the instruments are touching the orbital plate, cribriform plate or fovea ethmoiditis can be warning signals to the surgeon, which increase the safety index in endoscopic sinus surgery.

The new technology in imaging and availability of high powered instruments helps to deal with the nasal polyposis and inflammatory disease more effectively and safely.

Dr. V. P. Sood
New Delhi

A – Bilateral extensive nasal polyposis is an inflammatory condition which has both allergic and ineffective origin. This is commonly seen in the age group of 30-40 and males are more affected than females although in Western population the females are equally affected. This is also known as sinonasal polyposis. The ethmoid and maxillary sinuses are always affected with extension to sphenoethmoidal recess.

The nasal vault is broadened and the aggressive nature of the disease at times mimics the inverted papillomatous lesion of paranasal sinuses.

I prefer to do coronal CT scan to know the extent, along with routine haematological and biochemical tests with special reference to diabetes.

The patient is put on antihistaminics, anti-inflammatory agents and steroids for 2 to 3 weeks during the planned surgical intervention. Under local or general anaesthesia routine bil nasal polypectomy is carried out until the infundibulum is seen, then routine FESS procedure is undertaken in exploring the osteomeatal complex and enbloc ethmoidal clearance, followed by maxillary sinus clearance with widening of the natural ostium. Due care is taken in haemostasis and bil. Nasal packing with BIPP is done for 24 to 48 hrs.

Post operative management is like other sinus disease. Periodical follow-up and check endoscopy is a must to see the recurrence which is very common.

Despite through clearance, the polypii recur and the recurrence rate is still 15 to 18%. In this management

one must keep in mind the possibility of inverted papilloma which will need more radical surgery as Lateral Rhinotomy with medical maxillectomy for its clearance. All the biopsies must be subjected for histopathology. If the report shows confirmed inverted papilloma then patient will need DXT 6000 rads for six weeks as the inverted papillomas are notorious in their behaviour and may lead to carcinomatous changes. At our centre I do extensive cryosurgery for the residual polypii if the check endoscopy reveals recurrence.

One must also keep in mind the mucormycosis in diabetics. However one may treat this condition if the recurrence is seen. The cryosurgery can be repeated any number of times as a palliative modality.

Dr. K. K. Desarda
Pune

A- I presume that this hypothetical patient does not suffer from multiple allergies, asthma, aspirin sensitivity (Samter's Syndrome), auto immune deficiency, diffuse rhinosinopathy with eosinophilia or primary or secondary dysfunction of cilia and/or mucus. In this situation following coronal and axial CT scan, I would perform Functional Endoscopic Sinus Surgery to remove polyps so as to establish natural ventilation and drainage of sinuses. My aim of the operation is not to remove each and every polyp seen with an endoscope but to eradicate polyps blocking the ostia of the sinuses and drain the secondary infection which is inevitable in these cases. I would operate this patient under general anaesthesia using either KTP/532 Laser or a Microdebrider (if not then conventional endoscopic instruments) to ensure as much preservation of the mucosa as possible in this surgery.

On the other hand if the patient is suffering from any of the above conditions mentioned in the beginning, I would still perform FESS with the clear explanation to the patient that the operation is not going to "cure" him/her but will be of some help. Following surgery in these patients I would vigorously pursue medical line of treatment i. e. Alkaline Nasal Douch, topical steroids and/or antihistamines, systemic antihistamines and/or decongestants only occasionally supplemented by a "pulsed" courses (periodic) of systemic steroids in intractable cases.

Dr. S. K. Kaluskar
North Ireland

A- Though a systemic etiology and immunological basis has been attributed for nasal polyps, why it arises only from the ethmoid mucosa alone is a riddle still unsolved. A satisfactory medical treatment is also not available as yet. After dealing with so many of these cases, I am slowly coming round to the thinking that there is a fungal etiology for all polyps.

My approach today for massive polyps is an endoscopic radical sphenofrontoethmoidectomy and a wide middle meatal antrostomy followed by systemic steroids post-operatively. This usually controls the polyps effectively.

Recurrence in my cases usually happens following an attack of upper respiratory infection, which is not treated promptly or properly. The common sites of recurrence in my cases are frontal recess, sphenoid sinus area and occasionally the antrum. Again in over 90% of recurrences I would attribute a fungal etiology.

Endoscopic recurrences—those detected only on endoscopy—which do not block the ostia of the various sinuses respond very well to medical treatment. Macroscopic recurrence would require a secondary endoscopic procedure followed by systemic steroid therapy. I would estimate that I have about 30% endoscopic recurrence and 15% macroscopic recurrence.

Dr. P. Thulsidas
Chennai

A—The problem of extensive bilateral nasal polypii is unfortunately only too common in my practice. In my view, the most important aspect of management is to let the patient understand that management is a long term strategy and not one single surgical procedure. Thus post-operative follow up treatment for prolonged periods is absolutely essential.

Functional endoscopic sinus surgery is the procedure I adopt most often. In a few instances, it may be necessary to initially remove a few large polypii to gain access. Because of the nature of the disease, pre-operative packing may not have been adequate and hence bleeding during surgery can be a nuisance – but only on two occasions have I had to abandon the procedure for favour of a second attempt later. more often than not, it is possible to proceed with packing after partial removal of polyps to gain access. However patience and diligence are virtues which will

stand the surgeon in good stead in a problem like this. It is important for the surgeon to be aware that blind removal of polyps in the presence of bleeding, can be a very dangerous enterprise. This is the situation most conducive for complications to occur. All removed material must be sent for histopath and microbiological studies in particular mycological studies, as a majority of these cases may be associated with aspergillosis. If such an association is established, post operative management must include appropriate therapeutic strategies.

Finally whatever the surgical procedure adopted, it cannot be overemphasised that meticulous follow up is the key to eradication of the disease.

**Dr. Mohan Kameswaran
Chennai**

A- To me primary line of treatment is surgical removal. But before surgery, I would like to give

- Antibiotics
- Steroids (Oral & Topical, if no contraindications)
- Antihistaminics
- Pre-operative evaluation with CT scan to know its extent, involvement and to see if fungal invasion is present, if there is a different soft tissue opacification is seen.
- Nasal endoscopic evaluation to see presence of middle turbinate, for often important landmark especially in revision cases.

Surgical management : Preferably I would like to remove polypii with debrider and removal of bony ethmoidal partition with routine FESS instruments under endoscopic control and care should be taken to preserve normal mucosa and to see that bones of turbinate and ethmoid should not be left bare as far as possible.

Post-operatively : I usually call the patient for regular debridement at least for two months (weekly or fortnightly) give alkaline nasal lavage, steroid spray and see that adhesion doesn't form.

Then patient is called every three months for 2 years and then every six monthly follow-up is advised so if one or two polyps is formed it should be removed during examination.

**Dr. Ajay I. Shah
Ahmedabad**

Management of extensive polyposis is a tricky problem. Whatever one may do the polyps reappear. At present what we are treating is the effect of polyposis and not the cause. The basic etiology, which is allergy, remains untreated. Hence the polyps recur. As far as polyposis is concerned, "Recurrence is the rule and not an exception". According to Prof. Stammberger, the whole world is facing the same problem and he feels that in future, if at all any remedy would come it would be from the medical side. It may even happen that FESS for polyposis will disappear from the surgical list.

For now, symptomatic polyposis i. e., the one causing persistent nasal obstruction, headache, sinusitis, proptosis, mucocoele etc. must be treated surgically. FESS is performed Anterior, posterior ethmoids, maxillary sinus and sphenoid if involved must be cleared. The maxillary ostium and the frontonasal recess must be cleared adequately and the ostium needs to be widened.

Every patient must be explained that there is bound to be a recurrence and hence regular follow up is a must even though the patient is asymptomatic. To begin with every 3 months and then 6 monthly endoscopy must be done and early polyposis must be plucked under local anaesthesia as an office procedure. The patient has to spare one day in six months to remain symptom free and prevent polyposis going to the stage where extensive surgical intervention may be demanded.

Every patient is started post-operatively on antihistaminic and decongestant for 4-6 weeks. Local steroids spray for at least 6 months. In few cases where there is early recurrence then even low dose of oral steroids is given. (Tab. Prednisolone 5mg. thrice and taper over 3 weeks). All the patients are advised to take to alkaline nasal douche twice a day. The idea being the allergen is not allowed to act on nasal mucosa for long time. This in addition prevents crust formation and synechia during the early post-operative period.

**Dr. Hetal Patel
Mumbai**

Compiled By
Dr. Vinod H. Shah
'Shruti' ENT Hospital, Opp. Sub Jail
Ring Road, Surat - 395002
Fax : 91-261-665757