NASAL POLYPI

MEDICAL OR SURGICAL PROBLEM

Mohamed Elsayed MD
AHMED MAHER TEACHING H.
AHMED A.BASET MD
AZHAR UNIVERSITY

Rhino Alex 2016
Nasal polyposis (NP) is a chronic inflammatory disease of the nasal and paranasal sinuses; allergies. chronic sinusitis. Despite different hypotheses of its causes, it remains poorly understood. The NP may be associated with asthma and other respiratory diseases such as cystic fibrosis, primary ciliary dyskinesia, and aspirin sensitivity.
Primary symptoms of NP are:
nasal blockage
loss of smell
rhinorrhea
sneezing
The management of NP has been the topic of frequent controversial debates for many decades.

Most authors agree on the fact that management of NP should be primarily based on a medical approach to be completed by surgical procedures only in the case of drug failure.

After 2 weeks of oral steroids, van Camp showed a clear improvement on nasal symptoms especially for nasal obstruction and loss of smell.

Holmberg et al. demonstrated that **intranasal fluticasone** or beclomethasone are effective in **reducing nasal symptoms** when compared with placebo.


Treatment of nasal polyposis and chronic rhinosinusitis with **fluticasone propionate** nasal drops reduces need for sinus surgery (**13 of 27 patients**).

*The Journal of Allergy and Clinical Immunology; 115: 1017-1023, May 2005*
All nasal symptoms clearly improved after steroid or ESS treatments with no differences between both treatment regimes.

Patients treated medically or surgically had similar scores of nasal symptoms after 12 months of treatment.

Allergy, vol. 60, 452:458, April 2005

Combined oral and intranasal steroids seem to be effective to treat NP by improving the sense of smell, nasal obstruction, and other symptoms.

Rhinology 2003:41: 97–102
Several studies using ESS have reported excellent subjective improvements of nasal symptoms in patients with nasal polyps.

Allergy 1999;54:7-11
Ann Allergy Asthma Immunol 2000;85:209-214

The effectiveness of both medical and surgical treatment were considered alike although surgery was limited to removal of the visible polyps. Blomqvist et al.

Jankowski and Bodino showed that **nasal obstruction** was a **major complaint** of NP patients and the long-lasting correction of **olfactory dysfunction** can be achieved through the **combination of nasalization and low dose of nasal steroids**.
Triggers

Interleukin (IL-5)
IgE
RANTES protein

Eosinophils
TREATMENT

MEDICAL TREATMENT:
Oral steroid
Nasal steroid
Immunotherapy  ???

SURGICAL TREATMENT
FESS

TREATMENT

MEDICAL TREATMENT:
Oral steroid
Nasal steroid
Immunotherapy  ???
Cleveland Protocol

Oral Steroid for 9 days:
60 mg 3 days
40 mg 3 days
20 mg 3 days

AMH Protocol

Oral Steroid 25 days:
Starting dose: 20-40 mg
INSs as first-line treatment for moderate to severe disease
TREATMENT

ORAL STEROID

Often cause side effects such as:
water weight gain,
increased appetite,
insomnia,
Mania or depression.

They can also cause serious problems with virtually every organ: system in the body:
Brain: temporary psychosis.
Eyes: cataracts and glaucoma.
Stomach: ulcers.
Diabetes in individuals who are “borderline diabetic,” and out-of-control diabetes in diabetics.
TREATMENT

Bone: osteoporosis, and also a really nasty problem called “aseptic necrosis of the femoral head” (the ball joint of the hip dies and must be surgically replaced with an artificial joint).
And this is a partial list.

TREATMENT

The more serious side effects occur primarily with long term use, but have been known to occur with short term use also.
TREATMENT

**TOPICAL STEROID**: in the form of nasal sprays are very effective, with little or no side effects even with long term use. This is because of their limited absorption into the blood stream unlike oral steroids. Fluticasone, flunisolide, mometasone and budesonide are some of the steroids available as nasal sprays.
IMMUNE THERAPY:
MEDICAL TTT
SURIGAL TTT
FAILURE
ASSOCIATED DISEASES

SURGICAL TREATMENT
Based on the published evidence, sinus surgery should be reserved for patients who do not satisfactorily respond to medical treatment.
In most patients, surgery followed by INS therapy is necessary for durable improvement in symptoms.
The main risks of surgery are:
Anesthesia,
Bleeding,
Recurrence.
Injury of neighborhood
Economic
Fortunately, such serious complications are rare.

Other Treatment Options and Potential Future Therapies for Nasal Polypi

Anti-IL-5 antibodies
   Reslizumab
   Mepolizumab

Anti-IgE Abs
   Omalizumab
Medical TTT

Surgical TTT
Surgical TTT

Surgical TTT
Surgical TTT

Surgical TTT
RESULTS

Mind you, this is a controversial topic and many excellent rhinologist treat polyps with steroids and reserve surgery only for people who do not respond to steroids.

RESULTS

Polyps respond very well to corticosteroid therapy sometimes disappearing completely. Oral steroids are associated with many side effects and are therefore only recommended for short courses in some instances. Large polyps may regress with steroid therapy but not disappear completely.
RESULTS

MEDICAL TREATMENT:
70% : IMPROVED
30% : MARKED IMPROVEMENT

SURGICAL TREATMENT:
70% MARKED IMPROVEMENT

RESULTS

FACTORS AFFECT TTT

AGE OF THE PATIENT
SIZE OF THE POLYP
RESPONSE TO MEDICAL TTT
ASSOCIATED DISEASES:
ASTHMA
ASPIRIN SENSITIVITY
RESULTS

AGE OF THE PATIENT
The younger the patient, the less the response to medical treatment, and the more possibility of recurrence. (surgically)

RESULTS

SIZE OF THE POLYP
The larger the size of the polyp, the less the response to medical treatment and the more possibility to recur. (SURGICALLY)
RESULTS

RESPONSE TO MEDICAL TTT
The less the response to medical treatment the more the possibility to recure after surgical treatment.

RESULTS

ASSOCIATED DISEASES:
CHANGE THE AVERAGE RESULTS OF MEDICAL AND SURGICAL TTT.
CONCLUSION

- NASAL POLYPI ARE ESSENTIALLY A MEDICAL PROBLEM.
- LOCAL STEROID IS THE IDEAL SAFE TREATMENT. (first line of treatment)
- (−/+ ) ORAL STEROID CAN BE ADDED TO LOCAL TTT, TO INCREASE THE EFFECT.

SURGERY: WHEN MEDICAL TTT IS NOT EFFECTIVE OR PATIENT IS NOT SATISFIED.

- PATIENT DOCTOR RELATIONSHIP.
- IMMUNE THERAPY.
- New therapeutic options are emerging for a subgroup of patients with severe INS-resistant diseases, including Abs against IL-5 and IgE.
- Individualized management of NP may control patients’ symptoms and improve QoL for years.
Thank You