



Reader Digest

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1. The prevalence of clinical presentations and pathological characteristics of antrochoanal polyp.

[Sarafraz M, Niazi A, Araghi S.](#)

Abstract

OBJECTIVE:

Antrochoanal polyps (ACPs) originating from the maxillary sinus, are considered as benign inflammatory lesions. In fact, these polyps are the hypertrophy of the mucous membrane of the maxillary sinus, which for unknown reasons grow through the maxillary sinus ostium towards the other portions of the nasal cavity and the choana, such a way that they may grow all the way to the nasopharynx and even oropharynx. ACP is usually unilateral however, the bilateral forms have been observed in some instances. Its most frequent clinical manifestations are nasal obstruction and rhinorrhea, whereas in many cases some other presentations such as epistaxis, dyspnea, and dysphagia, and weight loss have been also noticed. The aim of this study was to investigate the relative prevalence of clinical manifestations and pathological characteristics in 87 patients with ACPs during a period of 15 years in this hospital.

METHODS:

It was a descriptive cross-sectional study, accomplished retrospectively, and based on existing data in the records of the patients admitted in Imam Khomeini Hospital of Ahvaz. In this study, the patients above 16 years old have been considered as adults. Each patient's data were collected using a questionnaire. Data analysis was performed by the statistical SPSS software (descriptive statistics and Chi-square test).

RESULTS:

87 patients were registered with the diagnosis of ACP during 1999 and 2014. Out of these patients 60% were females and 40% were males. Predominant clinical manifestation was nasal obstruction with an incidence of 39%; and the least frequent manifestation was weight loss with an incidence of 0%. Moreover, the left nasal cavity was more involved with the incidence of 55%. Among the existing surgical techniques. Functional Endoscopic Sinus Surgery (FESS), Caldwell- Luc procedure, and combined approach were the most common applied techniques, with frequencies of 64%, 24% and 12%, respectively. Confidence Interval (CI) = 0.03 ± 0.2 , Odd ratio = 0.26, and $p = 0.21$.



CONCLUSION:

Nasal obstruction was the predominant clinical symptom of ACP. The left nasal cavity was more involved than the right-side. FESS was the commonest employed surgical procedure; and the inflammatory pattern has been the most pathological presentation

Niger J Med. 2015 Jan-Mar; 24(1):12-6

2. Non-invasive Assessment and Symptomatic Improvement of the Obstructed Nose (NASION): a physiology-based patient-centred approach to treatment selection and outcomes assessment in nasal obstruction.

[Nouraei S1, Virk JS1, Kanona H1, Zatonski M1, Koury EF1, Chatrath P1.](#)

Abstract

OBJECTIVES:

To evaluate the impact of selecting treatment for nasal obstruction on the basis of a structured physiology-based assessment protocol on patient outcomes.

DESIGN:

Prospective longitudinal study.

SETTING:

District general hospital.

PARTICIPANTS:

A population of 71 patients with a mean age of 33 years, containing 36 males, who presented with nasal obstruction for consideration of nasal surgery. All patients underwent a structured clinical assessment, skin-prick allergy testing, and oral-nasal flow-volume loop examination. 51 patients completed follow-up and mean follow-up was 11 months.

MAIN OUTCOME MEASURES:

NOSE, SNOT-22 and NASION scales.



RESULTS:

6 patients had conservative treatment, 28 had septal/turbinate surgery and 17 underwent nasal valve surgery. Mean NOSE score fell from 68 ± 18 to 39 ± 31 following treatment. Mean SNOT-22 score fell from 47 ± 20 to 29 ± 26 following treatment. The difference between pre-treatment and post-treatment NOSE and SNOT-22 scores were statistically significant. Success rate of septal/turbinate surgery in patients without nasal allergy was 88% and this fell to 42% in patients undergoing septal/turbinate surgery who also had nasal allergy. Presence of nasal allergy was the only independent predictor of treatment failure. Patients with nasal valve surgery reported significantly greater symptomatic improvement following surgery. The newly formed NASION scale demonstrated internal consistency with a Cronbach α of 0.9 and excellent change-responsiveness and convergent validity with correlation coefficients of 0.64 and 0.77 against treatment-related changes in SNOT-22 and NOSE scales respectively.

CONCLUSIONS:

Successful surgical outcomes can be achieved with the use of a structured history, clinical evaluation and physiological testing. Flow-volume loops can help elucidate the cause of nasal obstruction. The newly formed NASION scale is a validated retrospective single time-point patient outcome measure. This article is protected by copyright. All rights reserved.

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ClinOtolaryngol. 2015 Aug 3

3. Hemorrhagic Complications of Endoscopic Sinus Surgery.

[Halderman AA1, Sindwani R1, Woodard TD2.](#)

Abstract

Major complications during endoscopic sinus surgery are rare and occur in 0.36% to 3.1% of patients. Postoperative hemorrhage accounts for 23% to 39% of complications. Despite being rare, major hemorrhage can be serious for the patient. This article discusses hemorrhagic complications during and following endoscopic sinus surgery, focusing on a review of the surgical anatomy, common pitfalls to avoid, preventative measures, and management of certain catastrophic complications for which preparedness can mean the difference between life and death.

OtolaryngolClin North Am. 2015 Oct; 48(5):783-93.



4. Endoscopic Septoplasty: A Retrospective Analysis of 415 Cases.

[Kulkarni SV1](#), [Kulkarni VP2](#), [Burse K2](#), [Bharath M2](#), [Bharadwaj C2](#), [Sancheti V2](#).

Abstract

Nasal obstruction is the most common complaint in nasal and sinus disease. Deviated nasal septum is a very frequently encountered and common cause. Surgical correction of a deviated septum-nasal septoplasty- is the definite treatment for septal deviation. Over the last 2 decades, the applications for endoscopy in the field of rhinology have evolved beyond functional endoscopic sinus surgery (FESS). Septoplasty which is among the three most commonly performed procedures in otolaryngology is particularly well suited to endoscopic application. Endoscopic septoplasty as a minimally invasive technique can limit the dissection and minimize trauma to the nasal septal flap under excellent visualization whose primary advantage is to decrease morbidity and post operative swelling in isolated septal deviation by limiting the excision to the area of deviation. This was a retrospective study, conducted in a tertiary care medical college hospital over a period of 5 years. The study group comprised 415 patients in and around Nashik District; who visited our tertiary health centre and were subjected to endoscopic septoplasty. Complete data records from 415 patients were available for statistical analysis. Maximum numbers of patients were in age group 20-39. The youngest patient was 7 years old and oldest was 75 years. Mean age was 32 years. The 7 years old was operated for DCR for congenital NLD block and septoplasty was adjunct procedure. Even the 75 years was operated for DCR. In the present study out of 415 cases, 256 (67.5 %) cases were male and 115 (32.5 %) cases were female. There is a male preponderance in the overall distribution of cases. In the present study of 415 patients, the most common operative procedure done was septoplasty in 260 (62.6 %), FESS with septoplasty in 38 (9.2 %) cases, septorhinoplasty in 41 (9.9 %) cases and DCR with septoplasty in 78 (18.3 %) cases. Endoscopic septoplasty facilitates good access to accomplish endoscopic DCR, FESS, and accurate and adequate septal graft harvest in severely deviated noses for septorhinoplasty. Complications like dental pain, paraesthesia, septal perforation, saddle nose deformity and persistent deviation are a rarity.

Indian J Otolaryngol Head Neck Surg. 2015 Sep; 67(3):248-54.

5. The efficacy assessment of a self-administered immunotherapy protocol.

[Schaffer FM1,2](#), [Garner LM1](#), [Ebeling M3](#), [Adelglass JM4](#), [Hulse TC3](#), [Naples AR1](#).

Abstract

BACKGROUND:

We previously reported the safety of a self-administered subcutaneous immunotherapy (SCIT) protocol. Here we report the results of the retrospective efficacy trial of the United Allergy Service (UAS) self-administered SCIT protocol. We hypothesized that by utilizing a slow SCIT buildup phase, designed to attain recommended allergen concentrations on a cumulative basis, efficacious outcomes and clinical relevance would be achieved.



METHODS:

We enrolled 60 SCIT patients and 56 control patients. The study contrasted baseline and treatment period combined symptom plus medication scores (CSMS) as the primary outcome measure and rhinoconjunctivitis quality of life questionnaire (RQLQ) scores as the secondary study outcome measure. Changes in pollen counts were also examined with regard to effects on these efficacy parameters.

RESULTS:

The treatment group showed significantly improved CSMS (standardized mean difference [SMD]: -1.57; 95% confidence interval [CI], -1.97 to -1.18; $p < 0.001$) and RQLQ (SMD: -0.91; 95% CI, -1.23 to -0.59; $p < 0.001$). These treatment group outcome measures were respectively improved by 33% and 29% compared to baseline and greater than 40% in comparison to the control group ($p < 0.0001$). Significant results were also shown when examining these outcome measures with regards to either monotherapy or poly-allergen SCIT. Furthermore, a comparison to recent meta-analyses of SCIT studies showed equivalent efficacy and clinical relevance. Assessment of pollen counts during the baseline and treatment periods further corroborated the efficacy of the UAS SCIT protocol.

CONCLUSION:

These efficacy results, and our previous safety results, show that a carefully designed and implemented self-administered SCIT protocol is efficacious and safe

Int Forum Allergy Rhinol. 2015 Oct 14.

6. Are atopy and eosinophilic bronchial inflammation associated with relapsing forms of chronic rhinosinusitis with nasal polyps?

[Yacoub MR1, Trimarchi M1, Cremona G1, Dal Farra S1, Ramirez GA1, Canti V1, Della Torre E1, Baldini M1, Pignatti P2, Bussi M1, Sabbadini MG1, Manfredi AA1, Colombo G1.](#)

Abstract

BACKGROUND:

The aetiopathogenesis of chronic rhinosinusitis with nasal polyps (CRSwNP) is still unknown. The role of atopy and the concept of united airways in such patients are still a matter of debate. In this pilot study we aimed at evaluating the degree of eosinophilic inflammation and the frequency of atopy in a cohort of CRSwNP patients candidate for Functional Endoscopic Sinus Surgery (FESS) and assessing the association between these factors and relapsing forms of CRSwNP.



METHODS:

30 patients (18 men, 12 women) with CRSwNP eligible for FESS were evaluated before and after surgery. Preoperative investigation included: history of previous relapse after FESS, clinical and laboratory allergologic assessment, spirometry, methacholine challenge, blood eosinophilia and determination of the fraction of nitric oxide in exhaled air (FeNO). Nasal fibroendoscopy, spirometry and FeNO determination were also assessed prospectively at 3 and 27 months post-FESS.

RESULTS:

18/30 subjects were atopic, 6/18 (33 %) were monosensitized, 16/30 (53 %) were asthmatics and 10/30 (33 %) had non steroidal antiinflammatory drugs (NSAIDs) hypersensitivity. Twenty-one patients (70 %) were classified as relapsers, 15/18 (83 %) among atopics, 6/12 (50 %) among non atopics ($p = 0.05$). Among patients with NSAIDs hypersensitivity, 9/10 (90 %) were relapsers. The median IgE concentration was 161.5 UI/mL in relapsers and 79 UI/mL in non-relapsers (ns). The mean FeNO decreased after FESS (43.1-26.6 ppb) in 84 % of patients, but this effect disappeared over time (FeNO = 37.7 ppb at 27 months). Higher levels of FeNO pre-FESS were detected in atopics, and in particular in relapsing ones (median 51.1 ppb vs 22.1, ns). Higher levels of FeNO pre-FESS were detected in asthmatic patients, especially in those who relapsed (median: 67 vs 64.85 ppb in non-relapsed patients, ns). The Tiffeneau Index (FEV1/FVC) was significantly lower in asthmatic relapsers than in non relapsers asthmatics (94.7 ± 11.1 versus 105 ± 5.9 - $p = 0.04$). Patients with asthma and atopy had a major risk of relapse ($p = 0.05$).

CONCLUSION:

In our pilot study, atopy, severe asthma, bronchial inflammation, NSAIDs hypersensitivity and high level of total IgE are possible useful prognostic factors for the proneness to relapse after FESS. The role of allergy in CRSwNP pathogenesis should consequently be given deeper consideration. Allergen specific immunotherapy, combined with anti-IgE therapy, may have an immunomodulatory effect preventing polyps relapse and need to be investigated

ClinMol Allergy. 2015 Sep 11; 13(1):23.

7. Stage III nasopharyngeal angiofibroma: Improving results with endoscopic-assisted midfacial degloving and modification to the Fisch staging system.

[Shah SR1, Keshri A2, Patadia S1, Sahu RN1, Srivastava AK1, Behari S1.](#)

Abstract

OBJECTIVES:

To study outcomes with endoscopic-assisted midfacial degloving for Fisch stage III nasopharyngeal angiofibroma and propose a new staging system.



DESIGN:

Retrospective study of patients with Fisch stage III juvenile nasopharyngeal angiofibroma (JNA) including preoperative angiography, intraoperative blood loss and residue/recurrence following surgery.

SETTING:

Tertiary care superspecialty referral center.

PARTICIPANTS:

Fifteen consecutive patients with Fisch stage III JNA undergoing operations over a period of 18 months.

MAIN OUTCOME MEASURES:

Preoperative angiography details, intraoperative blood loss, residue/recurrence, complications of surgery.

CONCLUSIONS:

Trans arterial embolization with particulate agents followed by endoscopic-assisted midfacialdegloving provides excellent outcomes with Fisch stage III JNAs. The modified Fisch staging system proposed would allow better preoperative evaluation and comparison of outcomes with different treatment options for stage III JNAs

J Craniomaxillofac Surg. 2015 Oct; 43(8):1678-83.

8. Histopathological features of sinonasal inverted papillomas in chinese patients.

[Zhao L1,2, Li CW3, Jin P1,2, Ng CL3, Lin ZB4, Li YY3, Li TY4, Petersson BF5, Shi L1,2, Wang Y3.](#)

Abstract

OBJECTIVES/ HYPOTHESIS:

Nasal inverted papilloma (IP) is a benign tumor with high recurrence rates. Evidence of inflammation has been reported in IP in Caucasian studies. This study aimed to investigate the histopathological patterns and their associations with clinical characteristics in Chinese patients with IP.

STUDY DESIGN:

Basic science study.



METHODS:

IP tissues were obtained from 50 Chinese patients with unilateral IPs. Biopsies of inferior turbinate mucosa from 17 healthy subjects were used as controls. The histological patterns and severity of epithelial remodeling and inflammatory cell infiltration were evaluated and analyzed for associations with clinical characteristics.

RESULTS:

Thirty-one percent of IP specimens were classified as grade I (mild remodeling) and 49% as grade II (moderate and severe remodeling). Concomitant inflammatory nasal polyps were found in 14 patients (28%). Recurrent IP was strongly associated with grade II (odds ratio: 5.81, 95% confidence interval: 1.34-25.18). Except CD4+ T cells, quantities of neutrophils, macrophages, eosinophils, CD8+ T cells, and FoxP3+ T-reg cells were significantly elevated in IP. Of these, neutrophils were the predominant cell type in IP.

CONCLUSIONS:

Inflammation may have potential roles in IPs and the higher grade of epithelial remodeling was associated with the recurrence of IPs.

LEVEL OF EVIDENCE:

NA Laryngoscope, 2015.

Laryngoscope. 2015 Oct 5.

9. Endoscopic surgery for malignant sinonasal tumours: an eighteen year experience.

[Lund VJ, Wei WI.](#)

Abstract

INTRODUCTION:

Curative resection of malignant tumours of the skull base is increasingly undertaken endoscopically. Hitherto the diverse histology, rarity and long natural history have made it difficult to accrue statistically robust cohorts for comparison with conventional craniofacial resection. It is now possible to make such a comparison in a large personal cohort.

METHOD:

Data on all cases of sinonasal malignancy undergoing endoscopic resection with curative intent over an eighteen year period were collected prospectively and analysed for survival and prognostic factors.



RESULTS:

There were 140 cases, 68 men and 72 women, aged 20-92 years (mean 63 yrs). Follow-up ranged from 6-184 months (mean 60 months). Eighteen different histopathologies were represented with olfactory neuroblastoma (36), malignant melanoma (33) and adenocarcinoma (19) being the commonest. Additional radiotherapy was given in 95 cases and chemotherapy in 49. Overall survival is 84% at 5 years and 69% at 10 years. Overall disease-free survival was 77% at 5 years and 56% at ten. Overall and disease-free survival at 5 (and 10) years is, respectively, 97% and 90% for olfactory neuroblastoma, 79% and 68% for adenocarcinoma and 56% and 39% for malignant melanoma.

CONCLUSION:

These results show that endoscopic resection is an alternative to conventional craniofacial resection in selected cases.

Rhinology. 2015 Sep; 53(3):204-11.

10. Role of Rhinopharyngoscopy in Diagnosis of Rhinopathies.

[Tajudeen BA1, Suh JD.](#)

Abstract

Rhinopathies, or diseases of the sinonasal cavity, are a heterogeneous group of disorders ranging from benign entities to malignant processes. Proper evaluation and treatment of rhinopathies are dependent on accurate visualization and characterization of the disease processes. Prior methods of evaluation of the sinonasal cavity were dependent largely on anterior rhinoscopy, which unfortunately provides poor visualization of the superior, posterior, and lateral extent of the sinonasal cavity. With the advent of high-definition flexible and rigid endoscopes, rhinopharyngoscopy has proven to be a critical component in the evaluation of the sinonasal cavity. Here, we discuss rhinopharyngoscopy with emphasis on technique and evaluation of common rhinopathies and future developments

Curr Allergy Asthma Rep. 2015 Aug; 15(8):45.