Pan Arab Rhinology Society
PARS Reader's Digest

Reader Digest

Digested by Dr. Tarek Kandil, MD. Consultant, students Hospital, Cairo University

1. Efficiency of external nasal dilators in pediatric nasal septal deviation.

Salturk Z, Inan M, Kumral TL, Atar Y, Yildirim G, Uyar Y.

Abstract

INRODUCTION:

Nasal septal deviation results from irregular development of the nasomaxillary complex and trauma. Treatment of nasal septal deviation in pediatric patients is one of the biggest challenges in rhinology. Surgery may alter craniofacial growth patterns, and so it may be indicated only in the selected cases. The use of external nasal dilators is a relatively new treatment modality in nasal obstruction.

OBJECTIVE:

This study was performed to assess the efficacy of external nasal dilator in pediatric nasal septal deviation patients.

METHODS:

Seventy-six children who were diagnosed with nasal septal deviation at our outpatient clinic were included in the study. The patients were divided into 2 groups: the external nasal dilator group was composed of 48 children that had used an external nasal dilator for at least 1 month and still been using, while the control group was comprised of 28 children that had not received any treatment and had not used an external nasal dilator. The parents of the children were asked to complete the obstructive sleep apnea 18 questionnaire. In addition, the external nasal dilator group was asked to complete the questionnaire after stopping external nasal dilator use for 2 weeks and the control group also repeated the obstructive sleep apnea 18 questionnaire.

RESULTS:

The obstructive sleep apnea 18 questionnaire results were significantly different between the external nasal dilator group and the control group at the beginning of the study (i.e., when patients in the external nasal dilator group were still using their dilators, P = 0.000). On the other hand, there was no difference between the 2 groups after the patients in the external nasal dilator group had stopped using their external nasal dilator (P = 0.670).

CONCLUSION:

External nasal dilator use relieved nasal septal deviation, which narrows the nasal valve. The results of this study suggest that external nasal dilator could be used in patients that are not candidates for septoplasty.

Int J Pediatr Otorhinolaryngol. 2014 Sep; 78(9):1522-5

2. Endoscopic sphenopalatine artery cauterization in recurrent posterior epistaxis: an experience at dhulikhel hospital, kathmandu university hospital.

Shrestha BL.

Abstract

Epistaxis is one of the most common emergencies encountered by the ENT (Ear, Nose and Throat) surgeons. As Compared to anterior Epistaxis, the posterior Epistaxis being the challenging management problem. With the advent of Rigid endoscope, the treatment of posterior Epistaxis become more easier and comfortable as compared to past where we have to keep the posterior pack for the control of bleeding. Thus, causing considerable discomfort and even cause the mucosal trauma and necrosis. Whereas in elderly, there is significant risk of nasal airway obstruction and complication such as hypoxia, cardiac arrhythmia or even death. Similarly, in case of failure of conservative management, internal maxillary artery ligation via transantral approach and also the ligation of ethmoidal.

Kathmandu Univ Med J (KUMJ). 2014 Jan-Mar; 12(45):85-6

3. Vitamin D in allergic disorders.

Pawlak J, Doboszyńska A.

Abstract

Vitamin D is a factor that plays a significant role in calcium-phosphate balance. It has an effect on bone metabolism and also has modulator and anti-inflammatory activity. It is claimed that vitamin D inhibits immunological reactions with Th1 and Th17 lymphocytes. The influence of vitamin D on Th2 lymphocytes is not clear. The main effect of vitamin D is probably the activation of Treg lymphocytes. It was observed that vitamin D had a beneficial influence on diseases connected with excessive activation of Th1 lymphocytes, such as multiple sclerosis, rheumatoid arthritis, non-specific enteritis, diabetes type 1 or psoriasis. The role of vitamin D in allergic diseases, in which increased activation of Th2-dependent reactions are of great importance, is controversial. However, due to a wide range of vitamin D activity, this view seems to be simplified. A beneficial effect on the course of allergic diseases was observed in up-to-date studies although the role of vitamin D in their pathogenesis has not been explained yet. On the basis of recent studies and well-known mechanisms of vitamin D activity on particular elements of the immunological system, the influence of vitamin D on the course of chosen allergic diseases, such as allergic asthma, atopic dermatitis and allergic rhinitis was presented considering the possibility of contribution of allergen-specific immunotherapy.

Postepy Hig Med Dosw (Online). 2014 Sep 12; 68:1152-70.

4. Odontogenic maxillary sinusitis: A review.

Simuntis R, Kubilius R, Vaitkus S.

Abstract

Maxillary sinusitis of odontogenic origin is a well-known condition in both the dental and otolaryngology communities. It occurs when the Schneiderian membrane is violated by conditions arising from dentoalveolar unit. This type of sinusitis differs in its pathophysiology, microbiology, diagnostics and management from sinusitis of other causes, therefore, failure to accurately identify a dental cause in these patients usually lead to persistent symptomatology and failure of medical and surgical therapies directed toward sinusitis. Unilateral recalcitrant disease associated with foul smelling drainage is a most common feature of odontogenic sinusitis. Also, high-resolution CT scans and cone-beam volumetric computed tomography can assist in identifying dental disease. Sometimes dental treatment alone is

adequate to resolve the odontogenic sinusitis and sometimes concomitant or subsequent functional endoscopic sinus surgery or Caldwell-Luc operation is required. The aim of this article is to give a review of the most common causes, symptoms, diagnostic and treatment methods of odontogenic maxillary sinusitis. Search on Cochrane Library, PubMed and Science Direct data bases by key words resulted in 35 articles which met our criteria. It can be concluded that the incidence of odontogenic sinusitis is likely underreported in the available literature

Stomatologija. 2014; 16(2):39-43

5. Antrochoanal polyp: clinical presentation and retrospective comparison of endoscopic sinussurgery and endoscopic sinus surgery plus mini-caldwell surgical procedures.

Kelles M, Toplu Y, Yildirim I, Okur E.

Abstract

Antrochoanal polyp is a benign polypoid lesion orginating from the maxillary sinus antrum and extending to the choana. Our aim was to assess the clinical presentation and associated rhinological findings of antrochoanal polyp patients and to evaluate results of 2 surgical treatments termed endoscopic sinus surgery (ESS) and ESS plus mini-Caldwell operation. The study included 46 patients. Factors such as patient age, sex, history of chronic sinusitis, allergic rhinitis, septal deviations, chonca bullosa, turbinate hypertrophy, and the origin of the polyp were assessed. We also evaluated ESS and ESS plus mini-Caldwellsurgical procedures for recurrences, synechia, bleeding, and ostium stenosis. Overall, there were 27 men and 19 women. The ESS approach was used in 26 cases, and 20 cases had combined ESS and mini-Caldwell procedures. The statistical significant difference between the 2 groups was only recurrence ($P < 0.05$). In the ESS group, bleeding, synechia, and ostium stenosis were seen more than in the ESS + mini-Caldwell group, but there was no significant difference between the 2 groups in bleeding, synechia, and ostium stenosis ($P > 0.05$). We thought that lower rate of recurrence found in ESS + Caldwell group in this study was associated with better visualization of the maxillary sinus walls and, therefore, easier resection of the remnant polyp. We concluded that higher incidences of bleeding and synechia were related to the mucosal damage occurring in the septum and the inferior concha due to excessive manipulation of endoscope and surgical instruments.

J Craniofac Surg. 2014 Sep; 25(5):1779-81

6. Surgery for allergic rhinitis.

Chhabra N, Houser SM.

Abstract

BACKGROUND:

Allergic rhinitis (AR) is a highly prevalent disorder that significantly impacts quality of life and affects millions of people annually. The most bothersome complaint is nasal obstruction, which is most commonly due to inferior turbinate hypertrophy.

METHODS:

This work presents a review of the literature and an overview of operative techniques.

RESULTS:

A variety of methods are available for addressing inferior turbinate hypertrophy in patients afflicted with AR. Although no single modality has been defined as the gold standard for treatment, the otolaryngologist should be familiar with an armamentarium of surgical techniques.

CONCLUSION:

The inferior turbinate is the initial deposit point for allergens and undergoes dynamic changes through the allergic cascade, which results in nasal obstruction. Targeting the inferior turbinate to augment the nasal airway is the mainstay of surgical treatment in AR. Judicious technique and a mucosal sparing philosophy are necessary to maximize outcomes and improve quality of life.

Int Forum Allergy Rhinol. 2014 Sep; 4 Suppl 2:S79-83.

7. The reliable treatment choice of nasopharyngeal angiofibroma and causes of operative bleeding.

Lin G, Lin C, Yi Z, Fang Z, Lin X, Xiao W, Li Z, Cheng J, Zhou A, Lan S.

Abstract

OBJECTIVE:

To introduce the efficacy of three surgical options for juvenile nasopharyngeal angiofibroma (JNA) resection, and causes of operative bleeding.

METHOD:

Retrospective analysis of 36 JNAs, three surgical options were used to resect the tumor. There were 15 cases of Class I tumors, using endoscopic nasal cavity approach. Eighteen cases of class II tumors, via extended Caldwell-Luk incision, using the transantral-infratemporal fosse-nasal cavity combined approach for tumor resection. Three cases of class III tumors, the combined intracranial and extra-cranial approach was used to resect the tumor. Meanwhile, report six typical cases for reference.

RESULT:

Fifteen (15/36) cases of class I tumors, 14 cases were completely resected for the first time without recurrence, 1 recurrence case was re-resected using the same approach. Eighteen (18/36) cases of class II tumors, 13 cases were completely resected for the first time without recurrence, 5 recurrence cases were re-resected totally. Three (3/36) cases of class III were not completely removed, and underwent about 40 Gy radiotherapy with good effects.

CONCLUSION:

Using these three surgical options can effectively remove different types of JNA. When necessary, the intracranial residue can use radiotherapy. Under direct vision to separate the tumor, and effective hemostasis play crucial roles for complete removal of the tumor.

Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2014 Jun; 28(11):770-5

8. Roles of HPV infection and Stathmin in the pathogenesis of sinonasal inverted papilloma.

Lin H, Lin D, Xiong XS.

Abstract

Background. This study aimed to investigate roles of human papilloma virus (HPV) infection and Stathmin in sinonasal inverted papilloma (SNIP). Methods. HPV DNA detection was performed by fluorescence-based PCR method. Stathmin protein expression was investigated by immunohistochemistry method and mRNA expression of Stathmin, Kif2a and Cyclin D1 were assessed by real-time polymerase chain reaction (PCR) in SNIP and control subjects.

Results. Positive rate of HPV DNA detected in SNIP was about 53.6% (15 of 28), recurrent cases showed higher rate of HPV infection compared with initial cases and higher Krouse stage (T3+T4) cases showed higher rate of HPV infection than lower Krouse stage (T1+T2) cases. Stronger expression of Stathmin, Kif2a and Cyclin D1 were observed in SNIP, especially HPV (+) SNIP. Conclusions. HPV infection was closely associated with recurrence and progression of SNIP. Stathmin is a valuable prognostic marker and could be considered as a therapeutic target in SNIP patients. Head Neck, 2014

Head Neck. 2014 Sep 15

9. Endoscopic transnasal management of sinonasal malignancies - our initial experience.

Gotlib T, Osuch-Wójcikiewicz E, Held-Ziółkowska M, Kużmińska M, Niemczyk K.

Abstract

INTRODUCTION:

Malignant tumors of the paranasal sinuses are traditionally managed through external approaches. Advances in endoscopic transnasal surgery have allowed for the endoscopic treatment of some of these tumors.

AIM:

To present the results of treatment of a series of patients with paranasal sinus malignancies treated with an endoscopic approach at a single institution.

MATERIAL AND METHODS:

The data on tumor type, operative technique, perioperative complications and postoperative course were analyzed.

RESULTS:

Eleven patients meeting the inclusion criteria were identified. The histopathology was as follows: malignant melanoma in 3 patients, squamous cell carcinoma in 2, adenocarcinoma in 2, poorly differentiated carcinoma in 1, hemangiopericytoma in 1, adenoid cystic carcinoma in 1 and fibrosarcoma in 1. There were no severe perioperative complications with the exception of 1 case of cerebrospinal fluid leak, which was successfully closed. The mean observation period was 13.5 months. One of the patients died of disease, another was lost to follow-up, and one was reoperated on due to recurrence. The remaining 8 patients are alive with no signs of recurrence.

CONCLUSIONS:
Our initial experience seems to confirm results obtained by other authors indicating that in selected cases endoscopic surgery of sinonasal malignancies is similarly effective as external approach surgery

Wideochir Inne Tech Malo Inwazyjne. 2014 Jun; 9(2):131-7

10. The impact of olfactory disorders in the United kingdom.

Philpott CM1, Boak D2.

Abstract
Olfactory disorders are believed to affect 5% of the general population and have been shown to bear significant psychosocial consequences to sufferers. Although more common than blindness and profound deafness in the United Kingdom, the impact of these disorders has not been assessed to date and the plight of British patients has yet to be quantified. In 2012, a patient support organization, Fifth Sense, was founded to provide information and support to sufferers of chemosensory disorders. Following a recent members conference, a survey of the membership was conducted anonymously using a series of questions based on an existing olfactory disorders questionnaire. From 496 respondents, this has demonstrated high rates of depression (43%) and anxiety (45%), impairment of eating experience (92%), isolation (57%), and relationship difficulties (54%). Women appear to have significantly more issues than men in terms of social and domestic dysfunction relating to olfactory loss (P = 0.01). Qualitative disorders also affected more than 1 in 5 members with parosmia reported in 19% and phantosmia in 24%. This paper discusses the details of the British story of anosmia and other related disorders as depicted by those most affected

Chem Senses. 2014 Oct; 39(8):711-8