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

1. Advances in treatment of congenital posterior choanal atresia.

Zhang J, Zhang Q, Liu D.

Abstract

Congenital posterior choanal atresia is a rare congenital deformity. Due to the influence of nose and face and intellectual development, its preferred surgical treatment. But surgical treatment methods and technology are in dispute. The using of high resolution display systems combine with micro tools can effectively reduce postoperative scarring and adhesion formation which is the key point to prevent restenosis. There is also the focus of controversy whether should place an expansive tube after operation. Currently nasal endoscopic approach has become the first choice for otolaryngologist treating congenital posterior choanal atresia

Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2016 Feb;30(4):342-4.

2. Evaluation of safety and usefulness of submental intubation in panfacial trauma surgery.

Singaram M1, Ganesan I2, Kannan R2, Kumar R1.

Abstract

OBJECTIVES:

Submental intubation has been advocated as an alternative to classical tracheostomy for certain indicated panfacial trauma surgeries. Surgeons should have various options for airway management in maxillofacial trauma patients. Most maxillofacial injuries involve occlusal derangements, which might require intraoperative occlusal corrections; hence, orotracheal intubation is not ideal. Maxillofacial surgeons generally prefer nasotracheal intubation; however, in cases with concomitant skull base fracture or nasal bone fracture, nasotracheal intubation might not be suitable; in these situations, tracheostomy is typically performed. However, the possible complications of tracheostomy are well known. Due to trauma situations and to avoid the complications of tracheostomy, submental intubation would be an ideal alternative procedure in selected maxillofacial trauma surgery patients. This study aimed to evaluate the safety and usefulness of a submental intubation technique for panfacial trauma surgery. Moreover, we intended to share our experience of submental intubation and to recommend this simple, safe procedure for certain panfacial trauma surgeries.

MATERIALS AND METHODS:

In five panfacial trauma patients, we performed submental intubation for airway management; the mean time required for the procedure was only eight minutes.

RESULTS:

We were able to execute this procedure safely in a short time without any intraoperative or postoperative complications.

CONCLUSION:

Submental intubation is a safe and simple technique for airway management in indicated panfacial trauma surgery patients

J Korean Assoc Oral Maxillofac Surg. 2016 Apr;42(2):99-104.

3. The use of FloSeal haemostatic sealant in the management of epistaxis: a prospective clinical study and literature review.

Wakelam OC1, Dimitriadis PA1, Stephens J1.

Abstract

INTRODUCTION It is standard practice in the UK that if conservative measures or chemical cautery fail to control epistaxis, patients receive nasal packing which is often uncomfortable, requires admission and has well documented associated morbidity. Our study aims to evaluate the use of FloSeal haemostatic sealant in managing patients with epistaxis. MATERIALS AND METHODS Patients were identified from those referred with active epistaxis. A successful outcome was defined as complete haemostasis with FloSeal alone, with no further significant bleeding requiring admission or further interventions in the subsequent 7 days. Patients reported satisfaction using a ten-point visual analogue scale. Ear, nose and throat doctors recorded patient demographics, time to prepare FloSeal, length of stay, need for further treatment and adverse events on an electronic database. RESULTS 30 patients were enrolled in the study. The mean time to prepare FloSeal was 5 minutes. The success rate of FloSeal was 90%. The mean length of stay was 2.75 hours. The mean patient satisfaction with FloSeal was 8.4/10. No adverse events occurred. DISCUSSION FloSeal was found to be effective in controlling anterior epistaxis. There was a single case of posterior epistaxis which required operative management. The literature largely supports FloSeal in anterior epistaxis, but indicates sphenopalatine artery ligation as the definitive management of posterior epistaxis. CONCLUSIONS Our data support the use of FloSeal in patients with anterior epistaxis not controlled with conservative measures or chemical cautery. It was found to be easy to use, is well tolerated by patients and is efficient in financial terms.

Ann R Coll Surg Engl. 2016 Aug 4:1-3.

4. Capsaicin for Rhinitis.

Fokkens W1, Hellings P2, Segboer C2.

Abstract

Rhinitis is a multifactorial disease characterized by symptoms of sneezing, rhinorrhea, postnasal drip, and nasal congestion. Non-allergic rhinitis is characterized by rhinitis symptoms without systemic sensitization of infectious etiology. Based on endotypes, we can categorize non-allergic rhinitis into an inflammatory endotype with usually eosinophilic inflammation encompassing at least NARES and LAR and part of the drug induced rhinitis (e.g., aspirin intolerance) and a neurogenic endotype encompassing idiopathic rhinitis, gustatory rhinitis, and rhinitis of the elderly. Patients with idiopathic rhinitis have a higher baseline TRPV1 expression in the nasal mucosa than healthy controls. Capsaicin (8-methyl-N-vanillyl-6-nonenamide) is the active component of chili peppers, plants of the genus Capsicum. Capsaicin is unique among naturally occurring irritant compounds because the initial neuronal excitation evoked by it is followed by a long-lasting refractory period, during which the previously excited neurons are no longer responsive to a broad range of stimuli. Patients with idiopathic rhinitis benefit from intranasal treatment with capsaicin. Expression of TRPV1 is reduced in patients with idiopathic rhinitis after capsaicin treatment. Recently, in a Cochrane review, the effectiveness of capsaicin in the management of idiopathic rhinitis was evaluated and the authors concluded that given that many other options do not work well in non-allergic rhinitis, capsaicin is a reasonable option to try under physician supervision. Capsaicin has not been shown to be effective in allergic rhinitis nor in other forms of non-allergic rhinitis like the inflammatory endotypes or other neurogenic endotypes like rhinitis of the elderly or smoking induced rhinitis.

Curr Allergy Asthma Rep. 2016 Aug;16(8):60.

5. Differential Diagnosis of Chronic Rhinosinusitis with Nasal Polyps.

London NR Jr, Reh DD.

Abstract

Nasal polyps are semi-translucent mucosal outgrowths of the paranasal sinuses which typically arise in the setting of chronic rhinosinusitis (CRS). Nasal polyps are also associated with asthma, aspirin sensitivity, cystic fibrosis and allergic fungal rhinosinusitis (AFS). The majority of nasal polyps are bilateral and characterized by tissue edema and eosinophil infiltration. Patients with nasal polyps often present with complaints including nasal obstruction, congestion, rhinorrhea or altered sense of smell. The differential diagnosis ranges from benign masses such as schneiderian papilloma, antrochoanal polyp, angiofibroma and encephalocele to malignant neoplasms such as squamous cell carcinoma (SCC), esthesioneuroblastoma, nasal lymphoma and rhabdomyosarcoma. These lesions may have a similar appearance as

nasal polyps and particular attention to an alternative diagnosis for nasal polyps should be entertained if the mass is unilateral or congenital in nature. Workup for patients with a unilateral mass should include radiographic imaging, possible biopsy and careful follow-up when appropriate. Here, we review the disease etiology of nasal polyps and describe the approach to the patient with nasal polyps with emphasis on differential diagnosis and workup.

Adv Otorhinolaryngol. 2016;79:1-12.

6. Botulinum Toxin for Rhinitis.

Ozcan C1, Ismi O2.

Abstract

PURPOSE OF REVIEW:

Rhinitis is a common clinical entity. Besides nasal obstruction, itching, and sneezing, one of the most important symptoms of rhinitis is nasal hypersecretion produced by nasal glands and exudate from the nasal vascular bed. Allergic rhinitis is an IgE-mediated inflammatory reaction of nasal mucosa after exposure to environmental allergens. Idiopathic rhinitis describes rhinitis symptoms that occur after non-allergic, noninfectious irritants. Specific allergen avoidance, topical nasal decongestants, nasal corticosteroids, immunotherapy, and sinonasal surgery are the main treatment options. Because the current treatment modalities are not enough for reducing rhinorrhea in some patients, novel treatment options are required to solve this problem.

RECENT FINDINGS:

Botulinum toxin is an exotoxin generated by Clostridium botulinum. It disturbs the signal transmission at the neuromuscular and neuroglandular junction by inhibiting the acetylcholine release from the presynaptic nerve terminal. It has been widely used in neuromuscular, hypersecretory, and autonomic nerve system disorders. There have been a lot of published articles concerning the effect of this toxin on rhinitis symptoms. Based on the results of these reports, intranasal botulinum toxin A administration appears to be a safe and effective treatment method for decreasing rhinitis symptoms in rhinitis patients with a long-lasting effect. Botulinum toxin type A will be a good treatment option for the chronic rhinitis patients who are resistant to other treatment methods.

Curr Allergy Asthma Rep. 2016 Aug;16(8):58.

7. Advances in Surgery: Extended Procedures for Sinonasal Polyp Disease.

Southwood JE, Loehrl TA, Poetker DM.

Abstract

In the standard functional endoscopic sinus surgery (FESS) procedure, the amount of dissection is often determined by the extent of disease with the goal to preserve as much normal mucosa as possible while restoring ventilation and reestablishing mucociliary clearance. A subset of patients with chronic rhinosinusitis with nasal polyposis (CRSwNP), however, may continue to have persistent mucosal inflammatory and aggressive polyp regrowth despite standard FESS and maximal pharmacology therapy, leading to recurrent and recalcitrant disease. Advanced endoscopic surgery techniques such as the modified endoscopic medial maxillectomy, endoscopic modified Lothrop procedure, otherwise known as a Draf 3 frontal sinusotomy, and nasalisation or radical ethmoidectomy are extensive surgical procedures to maximize disease clearance while providing sizeable drainage pathways for effective postoperative surveillance and topical delivery of medications. Studies have shown a decreased risk of revision surgery as well as a longer time interval for revision surgery in patients with refractory CRSwNP who have undergone extensive sinus surgery for polyps.

Adv Otorhinolaryngol. 2016;79:148-57

8. Allergic Fungal Rhinosinusitis: The Latest in Diagnosis and Management.

Loftus PA, Wise SK.

Abstract

Allergic fungal rhinosinusitis (AFRS) is the most common form of fungal sinusitis in the United States. Its pathophysiological basis is associated with a predisposed person's type I IgE-mediated allergic response to inhaled mold spores that are ubiquitous in the environment. AFRS is a well-recognized type of chronic, recurrent, and non-invasive hypertrophic sinus disease that affects immunocompetent hosts, most commonly young African American males. There are 5 main criteria used for the diagnosis of AFRS, one being the presence of nasal polyposis. A review of the current literature was performed in order to provide the most up-to-date knowledge regarding the background, diagnosis, management, recent research, and controversies surrounding AFRS. Although much is known about the pathophysiology and etiology of this disease, controversy exists regarding the importance of type I hypersensitivity in AFRS, as humoral immunity and immunoglobulin-independent pathways may also contribute. The potential role of local sinonasal IgE production in the pathophysiology of AFRS is an area of discussion, as is the role of preoperative antifungal medication

in improving postoperative patient outcomes. Recent advancements in the diagnosis of AFRS include identification of genes and proteins unique to or over-expressed in AFRS patients. Although AFRS is a well-known and well-described cause of nasal polyposis, controversy still exists regarding this diagnosis. Advances in research may eventually resolve any diagnostic controversies in AFRS

Adv Otorhinolaryngol. 2016;79:13-20.

9. Smoking, not human papilloma virus infection, is a risk factor for recurrence of sinonasal inverted papilloma.

Roh HJ1, Mun SJ, Cho KS, Hong SL.

Abstract

BACKGROUND:

The recurrence rate of sinonasal inverted papillomas (SNIP) is 15-20%. However, few studies have investigated patient-dependent factors related to recurrence of SNIPs.

OBJECTIVE:

To analyze risk factors, including human papilloma virus (HPV) infection and smoking, as well as other factors, for recurrence of SNIPs.

METHODS:

Fifty-four patients who were diagnosed with SNIP and underwent surgery were enrolled: 39 men and 15 women, with the mean age of 54.0 years. Their mean follow-up was 40.6 months. Demographics and information about the history of smoking, previous surgery, tumor extent, follow-up, and recurrence were reviewed retrospectively. Those patients whose tumors were associated with malignant transformation were excluded in this study. HPV detection and genotyping in the tumor specimens were performed with the HPV DNA chip, a polymerase chain reaction-based DNA microarray system.

RESULTS:

Seven patients (13.0%) had recurrence, with a mean time to recurrence of 39.8 months. Recurrence rates in T1, T2, T3, and T4 of the Krouse staging system were 0% (0/4), 8.3% (2/24), 17.4% (4/23), and 33.3% (1/3), respectively (p > 0.5). Eight patients (14.8%) were positive for HPV DNA. All of these patients belonged to the group without recurrence (p > 0.5). However, recurrence rates according to HPV DNA positivity were not statistically different (0% versus 15.2%). Three (42.9%) in the group with recurrence and four (8.5%) in the group without recurrence were smokers (p < 0.5).

CONCLUSION:

Smoking was associated with recurrence of SNIP. However, HPV infection is not a recurrence of SNIP risk factor.

Am J Rhinol Allergy. 2016 Mar-Apr;30(2):79-82

10. Clinical management of squamous cell carcinoma associated with sinonasal inverted papilloma.

Yasumatsu R1, Nakashima T2, Sato M2, Nakano T2, Kogo R2, Hashimoto K2, Sawatsubashi M2, Nakagawa T2.

Abstract

OBJECTIVE:

The aim of this study was to investigate the clinical features and prognosis of patients with squamous cell carcinoma (SCC) associated with sinonasal inverted papilloma (IP).

METHODS:

The medical records of 95 patients who were diagnosed with IP or SCC associated with IP were retrospectively reviewed. Out of 95 patients, 15 were diagnosed with SCC associated with IP. The clinical characteristics, treatment modalities, and survival outcomes of the patients were analyzed.

RESULTS:

The incidence of SCC associated with IP was 15.8%. Although differential diagnosis between IP and SCC associated with IP is difficult, epistaxis may be the specific symptom in SCC associated with IP cases. The 3-year disease-specific survival rate was higher in cases with T1, 2 and 3 than in cases with T4. There was no significant difference in survival rate between maxillary sinus and other primary sites. On the other hand, there was a significant difference in survival rate between the microscopic SCC with IP cases and the other cases. In addition, the patients with <70 years old better than those with >70 years old with a 3-year disease free survival of 80% versus 0%.

CONCLUSIONS:

Some T4 patients were found to have a highly aggressive disease. Therefore, complete surgical resection followed by chemo-radiation therapy is the recommended treatment for patients with T4 disease to control of the primary tumor site

Auris Nasus Larynx. 2016 Apr 20. pii: S0385-8146(16)30113-4.