Pan Arab Rhinology Society
PARS Reader's Digest

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

1. Management of the Airway in Apert Syndrome.

The mXie C1, De S, Selby A.

Abstract

Management of the airway in Apert syndrome is complex and multidisciplinary. This rare syndrome, occurring in up to approximately 1 in 65,000 live births, results in airway compromise at various anatomic levels, in addition to abnormal central respiratory drive. Obstructive apneas arise because of decreased airway caliber, which may occur in the form of congenital bony nasal stenosis, choanal atresia, a deviated nasal septum, a narrowed nasopharynx, a thick long soft palate, lateral palatal swellings, and a tracheal cartilage sleeve. Central apneas in Apert syndrome arise because of raised intracranial pressure and/or Chiari malformations. The purpose of this study was to investigate our treatment methods and outcomes in optimizing the airway in this complex, rare and interesting cohort of patients who present with airway compromise. Patients with Apert syndrome were retrospectively evaluated during a period from 1990 to 2013. Treatments for obstructive apnea were dilatation of nasal airways and choanal atresia repair, adenoidectomy, tonsillectomy, early midface advancement, and noninvasive ventilation. The insertion of ventriculoperitoneal shunts, fronto-orbital advancement, and Chiari decompression aid in managing central apneas. The authors present our experience at Alder Hey Children's Hospital, Liverpool, one of the 4 Supraregional Craniofacial Units in the United Kingdom.

J Craniofac Surg. 2015 Dec 10

2. Use of Fillers in Rhinoplasty.

Moon HJ1.

Abstract

Surgical rhinoplasty is the one of the most common cosmetic procedures in Asians. But there are limitations, such as down time, high cost, and a steep learning curve. Most complications are implant related. A safer and less invasive procedure is rhinoplasty using fillers. Good knowledge of the nasal anatomy is essential for rhinoplasty using fillers. Knowledge of nerves, blood supply, and injection plane allows avoiding complications. There are several planes in the nose. The deep fatty layer is recommended for injection, because it is w.

ide and loose and there are less important neurovascular structures. Botulinum toxin also can be used for noninvasive rhinoplasty.

ClinPlast Surg. 2016 Jan; 43(1):307-17

3. [Clinical analyses of patients with intractable epistaxis originated from deep-seated nasal cavity].

Xu T1, Li N2, Jiang Y1, Yu H1, Yu L1, Jiang Y1.

Abstract

OBJECTIVE:

To investigate the clinical features and management of intractable deep-seated epistaxis.

METHODS:

Clinical data were analyzed retrospectively in 195 patients with intractable deep-seated epistaxis treated in Affiliated Hospital of Qingdao College between June 2008 and June 2014. The analyses included common risk factors, bleeding sites, treatments and therapeutic effects. SPSS 17.0 software was used to analyze the data.

RESULTS:

There were 162 males and 33 females, aged from 15 to 88 years old (mean 52 ± 16 years). One hundred and eighty-seven cases (95.9%) were unilateral and 8 cases (4.1%) were bilateral. One hundred and twenty-six cases (64.6%) had the history of hypertension or blood pressure higher than normal on admission. Eight patients were cured by nasal packing and appropriate drugs, and 187 patients were treated by endoscopy and electrocoagulation. The numbers of treatment needed to stop bleeding were 1 time in 184 cases (98.4%), 2 times in 3 cases (1.6%). Thirteen cases did not have certain bleeding point, while the other 174 had certain one or more bleeding sites. The rewarded bleeding sites were 222, which were found in the following different sites: posterior inferior nasal meatus (33.3%, 74 /222), olfactory cleft of nasal septum (26.6%, 59/222), the root of the middle turbinate (14.0%, 31/222), and so on. Hypertension and diabetes were risk factors (OR value was 3.411, 7.142, both $P < 0.05$).

CONCLUSIONS:

Intractable deep-seated epistaxis are mainly found in males and are almost unilatera1. Hypertension and diabetes are the common risk factor. The most effective and safe treatment for intractable deep-seated epistaxis is electrocoagulation under nasal endoscopy

ZhonghuaEr Bi Yan HouTou Jing WaiKeZaZhi. 2015 Jul; 50(7):556-9

4. Indications for open procedures in the endoscopic era.

Konstantinidis I1, Constantinidis J.

Abstract

PURPOSE OF REVIEW:

Endoscopic sinus surgery became the gold standard in inflammatory disorders of the nose and paranasal sinuses, in cerebrospinal fluid leak and epistaxis management, and established its efficacy in the oncology of the region. However, there are certain limitations which make an external approach mandatory. This article reviews the recent literature describing the cases where an open procedure is still indicated.

RECENT FINDINGS:

Despite the evolution of endoscopic surgery external approaches are still indicated. Osteoplastic flap remains an option for the refractory inflammation of the frontal sinus. Benign and malignant tumours with lateral or superior extension, neurovascular involvement, and bony/soft tissue erosion usually require an external approach. Superior and lateral posterior wall defects of frontal sinus with cerebrospinal fluid leak may mandate an open procedure. Management of severe epistaxis may still necessitate in selected cases an external approach when endoscopic surgery fails and embolization setting is not available.

SUMMARY:

Although advances in endoscopic instrumentation and techniques steadily decrease the indications for external approaches, they continue to have a role in the management of nasal disorders. This study summarizes the recent literature and provides a comprehensive review of the up-to-date remaining indications for open procedures in the nose and paranasal sinuses.

CurrOpinOtolaryngol Head Neck Surg. 2015 Dec 16.

5. Endoscopic Management of Esthesioneuroblastoma.

Roxbury CR1, Ishii M1, Gallia GL2, Reh DD3.

Abstract

Esthesioneuroblastoma is a rare malignant tumor of sinonasal origin. These tumors typically present with unilateral nasal obstruction and epistaxis, and diagnosis is confirmed on biopsy. Over the past 15 years, significant advances have been made in endoscopic technology and techniques that have made this tumor amenable to expanded endonasal resection. There is growing evidence supporting the feasibility of safe and effective resection of esthesioneuroblastoma via an expanded endonasal approach. This article outlines a technique for endoscopic resection of esthesioneuroblastoma and reviews the current literature on esthesioneuroblastoma with emphasis on outcomes after endoscopic resection of these malignant tumors.

OtolaryngolClin North Am. 2016 Feb; 49(1):153-65.

6. Subcutaneous Immunotherapy Improves the Symptomatology of Allergic Rhinitis.

Lourenço EA1, Caldeira EJ2, Carvalho CA2, Cunha MR2, Carvalho MV3, Passos SD4.

Abstract

Introduction The relevance of allergic rhinitis is unquestionable. This condition affects people's quality of life and its incidence has increased over the last years. Objective Thus, this study aims to analyze the effectiveness of subcutaneous injectable immunotherapy in cases of nasal itching, sneeze, rhinorrhea and nasal congestion in allergic rhinitis patients. Methods In the present study, the same researcher analyzed the records of 281 patients. Furthermore, the researchers identified allergens through puncture cutaneous tests using standardized extracts containing acari, fungi, pet hair, flower pollen, and feathers. Then, the patients underwent treatment with subcutaneous specific immunotherapy, using four vaccine vials for desensitization, associated with environmental hygiene. The authors analyzed conditions of nasal itching, sneeze, rhinorrhea, and nasal congestion throughout the treatment, and assigned them with a score ranging from zero (0), meaning absence of these symptoms to three (3), for severe cases. The symptoms were statistically compared in the beginning, during, and after treatment. Results In this study, authors analyzed the cases distribution according to age and the evolution of symptomatology according to the scores, comparing all phases of treatment. The average score for the entire population studied was 2.08 before treatment and 0.44 at the end. These results represent an overall improvement of ~79% in symptomatology of allergic rhinitis in the studied population. Conclusion The subcutaneous immunotherapy as treatment of allergic rhinitis led to a reduction in all symptoms studied, improving the quality of life of patients, proving itself as an important therapeutic tool for these pathological conditions.

Int Arch Otorhinolaryngol. 2016 Jan; 20(1):6-12

7. Allergic Fungal Rhinosinusitis and the Unified Airway: the Role of Antifungal Therapy in AFRS.

Ryan MW1, Clark CM2.

Abstract

Allergic fungal sinusitis (AFS) or rhinosinusitis (AFRS) is a form of polypoid chronic rhinosinusitis that is believed to be due to hypersensitivity to fungal antigens. The disease is characterized by type 1 hypersensitivity to fungal allergens, dramatically elevated total serum IgE, accumulation of thick eosinophil-laden mucin with non-invasive fungal hyphae within the paranasal sinuses, nasal polyposis, and sinus bony remodeling. Because of many clinicopathologic similarities to allergic bronchopulmonary aspergillosis (ABPA), these conditions can be considered analogous examples of disease in the unified airway. However, these conditions rarely occur together and their treatment differs. The treatment of AFRS relies upon surgical removal of fungal hyphae in eosinophilic mucin, while antifungal therapy is used to clear fungi from the airways in ABPA. Several uncontrolled studies suggest there may be some benefit to antifungal agents in AFRS, but randomized trials of topical and systemic antifungal therapies have not shown beneficial results in chronic rhinosinusitis (CRS). Antifungal treatment within the sinonasal cavities does not appear to be an effective approach for most chronic sinusitis, and antifungal therapy for AFRS is unproven.

Curr Allergy Asthma Rep. 2015 Dec;15(12):75

8. [Concurrent Endoscopic Sinus Surgery (FESS) with Septorhinoplasty - Indication, Risks and Chances].

Koch T1, Lenarz T2, Stolle S2.

Abstract

Background: Patients with a chronic rhinosinusitis (CRS) and a concurrent deformity of the outer nose often require a septorhinoplasty (SRP) for functional or aesthetic reasons, combined with functional endoscopic sinus surgery (FESS). Aim of this study was to rule out the benefit of this combined approach.**Patients and Methods:**In a prospective study of 55 patients (30 m, 25 f, age 16-77 years) with a chronic rhinosinusitis with or without polyps combined with a deformity of the outer nose we performed a FESS together with a SRP using a closed or open approach. The control group included 55 patients (18 m, 37 w, age 18-62 years) with SRP alone. All patients got the same type of anestesia and an antibiotic prophylaxis with clindamycin. We compared the rates of inflammation and other complications of surgery. **Results:**The only difference between study group and control group was the period of time for

surgery. There was neither a relevant inflammation in both groups nor any other significant complication (bleeding, edema, etc). Also the rate of minor revisions after SRP was almost the same in both groups.**Conclusions:** The combined FESS and SRP is a safe and effective method without an increased risk of complications compared with SRP alone

Laryngorhinootologie. 2015 Dec 8.

9. The Olfactory Cleft Endoscopy Scale correlates with olfactory metrics in patients with chronic rhinosinusitis.

Soler ZM1, Hyer JM2, Karnezis TT1, Schlosser RJ1.

Abstract

BACKGROUND:

Olfactory loss affects a majority of patients with chronic rhinosinusitis (CRS). Traditional objective measures of disease severity, including endoscopy scales, focus upon the paranasal sinuses and often have weak correlation to olfaction.

METHODS:

Adults with CRS were prospectively evaluated by blinded reviewers with a novel Olfactory Cleft Endoscopy Scale (OCES) that evaluated discharge, polyps, edema, crusting, and scarring of the olfactory cleft. Objective olfactory function was assessed using "Sniffin' Sticks" testing, including composite threshold-discrimination-identification (TDI) scores. Olfactory-specific quality of life was evaluated using the short modified version of the Questionnaire of Olfactory Disorders (QOD-NS). Interrater and intrarater reliability was assessed among 3 reviewers for OCES grading. Multivariate linear regression was then used to test associations between OCES scores and measures of olfaction, controlling for potential confounding factors.

RESULTS:

The OCES score was evaluated in 38 patients and had a high overall reliability (intraclass correlation coefficient [ICC] = 0.92; 95% confidence interval [CI], 0.91 to 0.96). The OCES significantly correlated with objective olfaction as measured by TDI score ($p < 0.001$), with TDI score falling by 1.13 points for every 1-point increase in OCES score. Similar significant associations were found for threshold, discrimination, and identification scores ($p < 0.003$ for all) after controlling for age, gender, race, and reviewer/review. The OCES was also highly associated with patient-reported QOD-NS scores ($p = 0.009$).

CONCLUSION:

A novel olfactory cleft endoscopy scale, OCES, shows high reliability and correlates with both objective and patient-reported olfaction in patients with CRS. Further studies to determine prognostic value and responsiveness to change are warranted

Int Forum Allergy Rhinol. 2015 Dec 31.

10. Results of endoscopic maxillary mega-antrostomy in recalcitrant maxillary sinusitis.

Cho DY1, Hwang PH.

Abstract

BACKGROUND:

In patients with chronically diseased maxillary sinuses, poor mucociliary clearance may result from long-standing inflammation or scarring from previous surgery. This subset of patients often has persistent sinus disease despite medical therapy and adequate antrostomy. Endoscopic maxillary mega-antrostomy (EMMA) is a mucosal sparing technique that facilitates mucus clearance and sinus irrigation in terminally dysfunctional maxillary sinuses. EMMA involves extending the antrostomy through the posterior half of the inferior turbinate down to the floor of the nose, creating a significantly enlarged antrostomy. This study describes our results of EMMA in recalcitrant maxillary sinusitis.

METHODS:

A retrospective review was performed of patients who underwent EMMA for recalcitrant maxillary sinusitis between July 2005 and September 2007. We studied diagnoses, comorbid factors, clinical efficacy, revision rate, and complications.

RESULTS:

Twenty-eight patients (average age, 48 years) underwent 42 EMMAs for recalcitrant maxillary sinusitis. Average follow-up was 11 months. All patients had previous maxillary sinus surgery (mean = 2.3). Relevant comorbid factors included prior Caldwell-Luc or maxillofacial surgery (16/42), cystic fibrosis (11/42), asthma (11/42), and IgG deficiency (3/42). The most common symptoms reported were facial pain/pressure and purulent rhinorrhea. At the time of the most recent postoperative examination, 74% of patients reported complete resolution of symptoms while 26% reported partial symptomatic improvement. There were no complications and the revision rate was 0%.

CONCLUSION:

Maxillary sinuses that appear to be terminally diseased may be rehabilitated surgically without the need for surgical stripping. EMMA is an effective and safe treatment option for the management of recalcitrant maxillary sinus disease.

Am J Rhinol. 2008 Nov-Dec; 22(6):658-62.