Pan Arab Rhinology Society
PARS Reader's Digest

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

1. CHARGE Association.

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Abstract

We present here a case of 17-year-old boy from Kolkata presenting with obesity, bilateral gynecomastia, mental retardation, and hypogonadotrophic hypogonadism. The patient weighed 70 kg and was of 153 cm height. Facial asymmetry (unilateral facial palsy), gynecomastia, decreased pubic and axillary hair, small penis, decreased right testicular volume, non-palpable left testis, and right-sided congenital inguinal hernia was present. The patient also had disc coloboma, convergent squint, microcornea, microphthalmia, pseudohypertelorism, low set ears, short neck, and choanalatresia. He had h/o VSD repaired with patch. Laboratory examination revealed haemoglobin 9.9 mg/dl, urea 24 mg/dl, creatinine 0.68 mg/dl. IGF1 77.80 ng/ml (decreased for age), GH <0.05 ng/ml, testosterone 0.25 ng/ml, FSH-0.95 µIU/ml, LH 0.60 ¨IU/ml. ACTH, 8:00 A.M cortisol, FT3, FT4, TSH, estradiol, DHEA-S, lipid profile, and LFT was within normal limits. Prolactin was elevated at 38.50 ng/ml. The patient's karyotype was 46XY. Echocardiography revealed ventricularseptal defect closed with patch, grade 1 aortic regurgitation, and ejection fraction 67%. Ultrasound testis showed small right testis within scrotal sac and undescended left testis within left inguinal canal. CT scan paranasal sinuses revealed choanalatresia and deviation of nasal septum to the right. Sonomammography revealed bilateral proliferation of fibroglandular elements predominantly in subareoalar region of breasts. MRI of brain and pituitary region revealed markedly atrophic pituitary gland parenchyma with preserved infundibulum and hypothalamus and widened suprasellar cistern. The CHARGE association is an increasingly recognized non-random pattern of congenital anomalies comprising of coloboma, heart defect, choanal atresia, retarded growth and development, genital hypoplasia, ear abnormalities, and/or deafness.[1] These anomalies have a higher probability of occurring together. In this report, we have described a boy with CHARGE association.

Indian J Endocrinol Metab. 2012 Dec;16(Suppl 2):S501-3

2. Operative management of choanal atresia: a 15-year experience.

Newman JR, Harmon P, Shirley WP, Hill JS, Woolley AL, Wiatrak BJ.
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Abstract

OBJECTIVE:

To analyze factors affecting 15-year surgical outcomes of choanal atresia repair.

DESIGN:

Case series.

SETTING:

Tertiary care pediatric hospital.

PATIENTS:

Between April 17, 1996, and March 23, 2010, a total of 42 patients aged 3 days to 15 years underwent endoscopic or transpalatal choanal atresia repair by our pediatric otolaryngology faculty.

MAIN OUTCOME MEASURES:

Reoperation and restenosis rates, with consideration of effects of mitomycin C therapy, stenting, and postoperative dilation.

RESULTS:

Three of 42 patients were excluded because of inadequate follow-up data; the follow-up time for the remaining 39 patients averaged 6.3 years (range, 1-14.9 years). Excluding 6 patients whose initial repair was performed by other physicians, 31 of 33 patients in whom we performed initial repair had a total of 43 endoscopic surgical procedures (19 patients had unilateral procedures, and 12 patients had bilateral procedures), and the other 2 underwent bilateral transpalatal repair. Of the total 43 sides we operated on endoscopically, 9 sides (21%) required revision surgery, including excision of scar tissue

or additional drilling of persistent bony stenosis. No significant difference was observed in the rate of restenosis among cases treated endoscopically with mitomycin C (22 of 43 operative sides, P = .13), with stenting (36 of 43 operative sides, P = .99), or with subsequent dilation (P = .45). When we used stents, they were usually (in 28 of 36 patients) left in place for 15 days or longer.

CONCLUSION:

Our revision rate after initial endoscopic repair of choanal atresia was low and was unaffected by adjuvant mitomycin C therapy or stenting.

JAMA Otolaryngol Head Neck Surg. 2013 Jan;139(1):71-5.

3. An analysis of 45 patients with pure nasal fractures.

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Abstract

BACKGROUND:

Nasal fracture is generally encountered alone or in combination with other serious injuries. The objective of this study was to analyze patients who had pure nasal fracture.

METHODS:

Forty-five records from patients with pure nasal fracture treated in the hospital between 7 October 2005 and 14 December 2011 were included. The following nasal fracture criteria were evaluated: age at the time of nasal trauma, gender, accident type, use of alcohol, findings of the physical examination, treatment time after the nasal fracture, and year and seasonal distribution.

RESULTS:

The age ranged from 6-32 years, with a mean age of 21 years. The most frequent reasons of the injury were violence 60% (27 cases) followed by falling 31% (14 cases), accidents 4.5% (2 cases) and sport injuries 4.5% (2 cases). The most frequent findings

were tenderness in 71.1% (32 cases), followed by swelling in 51.1% (23 cases), nasal deviation in 42.2% (19 cases), and epistaxis in 15.6% (7 cases). Nasal bone fracture was diagnosed exactly by standard X-ray films in 91.1% (41 cases).

CONCLUSION:

In this study; pure nasal bone fractures occurred primarily among men under 25 years of age, and fights were found to be the main etiologic factor.

Ulus Travma Acil Cerrahi Derg. 2013 Mar;19(2):152-156

4. National long-lasting effect of endonasal endoscopic sphenopalatine artery clipping for epistaxis.

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Abstract

Abstract Conclusion: We consider sphenopalatine artery ligation to be a safe and effective treatment of posterior epistaxis as the long-term need for revision surgery and the complication rates are low. Surgery should be considered earlier in the treatment of posterior epistaxis. Objectives: Posterior epistaxis is common and surgical endoscopic ligation of the sphenopalatine arteries is indicated in severe cases. Knowledge about long-term effects and complications is sparse. Methods: Within 2001-2006, 78 patients underwent endonasal endoscopic-guided surgery for posterior epistaxis in one of the eight ENT clinics in Denmark treating these patients. In 2011, 45 patients were still alive and eligible for the study. Patients were contacted by telephone and invited to complete an interview questionnaire on late adverse affects and recurrence. Results: In all, 42 of 45 patients participated in the mean follow-up. The mean follow-up was 6.7 years: 90% of patients (n = 38) obtained an effect of the treatment during follow-up; 78% (n = 33) had no recurrent epistaxis, 12% (n = 5) had recurrent epistaxis but only needed non-surgical specialized treatment; 10% (n = 4) required revision surgery due to recurrent epistaxis within the 6.7 mean years of follow-up; and 26% of the patients had minor postoperative complications, permanent nasal crusting being most persistent and frequent.

Acta Otolaryngol. 2013 Mar 11

Pan Arab Rhinology Society
PARS Reader's Digest

5. Chronic Rhinosinusitis - EPOS 2012 Part I.

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Abstract

An expert group of the European Academy of Allergy and Clinical Immunology (EAACI) and the European Rhinologic Society (ERS) has recently published the revised position paper for acute and chronic rhinosinusitis (EPOS 2012). In the following article, the most important aspects of the EPOS 2012 paper concerning chronic rhinosinusitis (CRS) are referenced. Every 10th European is suffering from a chronic inflammation of the nose and paranasal sinuses EPOS key messages according CRS are: 1. CRS is an inflammatory disease, not an infection. 2. CRS comes in 2 different subtypes, namely CRS without polyps (CRSsNP) and CRS with polyps (CRSwNP). CRSwNP is diagnosed, when nasal polyps are visible at an appropriate nasal endoscopic examination. Otherwise CRSsNP is classified. In the EPOS 2012 paper the current pathogenetic knowledge of these 2 different CRS subtypes are discussed. Current research focuses on epithelial/immune cell interactions, the biofilm hypothesis and the superantigen hypothesis. Both CRS subtypes may be associated with different frequencies with other diseases, especially allergies, asthma and aspirin exacerbated respiratory disease (AERD). These comorbidities should be recorded and treated. The standard diagnostic procedures include medical history, nasal endoscopy, CT-scans of the paranasal sinus, and allergy test of common inhalant allergens. The classification of disease severity in mild, moderate and severe was complemented with a concept of symptom control in controlled, partly controlled and uncontrolled. Also, a 'difficult-to-treat-CRS' was defined. The choice of therapy depends upon symptom intensity. In patients with moderate and severe symptoms, usually several weeks of conservative treatment including topical steroids are administered. In non-responders, surgical treatment (functional endonasal sinus surgery) is indicated. The EPOS Group offers evidence-based treatment algorithms for general practitioners and ENT-specialists.

Laryngorhinootologie. 2013 Mar;92(3):193-201; quiz 202-3

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6. Symptoms in chronic rhinosinusitis with and without nasal polyps.

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Abstract

OBJECTIVES/HYPOTHESIS:

In this study we analyzed differences in symptoms scored between chronic rhinosinusitis patients with (CRSwNP) and without nasal polyps (CRSsNP). According to the European Position Paper on Rhinosinusitis and Nasal Polyps, CRSwNP and CRSsNP diagnoses are defined by clinical criteria supported with endoscopy. We wanted to know if it is possible to make an accurate distinction between patients with and without nasal polyps based on clinical impression.

STUDY DESIGN:

Retrospective case-control study.

METHODS:

We collected Rhinosinusitis Outcome Measure 31 (RSOM-31) questionnaires from chronic rhinosinusitis patients with and without nasal polyps and compared mean total RSOM-31 scores, mean domain scores, mean symptoms scores, and percentages of patients reporting symptoms per diagnosis based on endoscopy and computed tomography scan.

RESULTS:

RSOM-31 questionnaires were collected from 234 patients. Although the total RSOM-31 score was similar and symptomatology considerably overlapping, patients with CRSwNP scored significantly higher and more often on nasal symptoms such as "rhinorrhea" and "decreased sense of taste or smell." Patients with CRSsNP significantly scored more often and higher on "facial pain" and "ear pain."

CONCLUSIONS:

Although there were significant differences in scores on several symptoms, there was considerable overlap of many symptoms, and it remains difficult to distinguish between CRSwNP and CRSsNP based on clinical impression alone.

Laryngoscope. 2013 Jan;123(1):57-63

7. Antrochoanal polyposis: analysis of 34 cases.

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Abstract

An antrochoanal polyp (ACP) is a benign polypoid lesion originating from the maxillary sinus and extending to the choana. The objective of our study is to assess etiological and associated features of ACPs, and outcome following surgical treatment. Thirty-four patients who had received surgical treatment for ACPs were followed for 35 ± 17.7 months. Factors including patient age, gender, history of allergic rhinitis, chronic sinusitis, nasal septal deviation, turbinate hypertrophy, concha bullosa, accessory ostia, as well as the origin of the polyp, the surgical technique used and any recurrence, were evaluated. Overall, there were 12 females and 22 males. Mean age was 24.94 ± 8.08. Septal deviation was present in 50 %, turbinate hypertrophy in 32.3 %, concha bullosa in 17.6 %, mucous retention cyst in 32.3 %, allergic rhinitis in 44.11 %, and chronic sinusitis in 20.5 %. An accessory ostia was observed in 97.05 %. The functional endoscopic sinus surgery (FESS) approach was used in 31 cases, and three cases had combined FESS and Caldwell Luc procedures. The mean follow-up time was 35.8 ± 17.7 months. Two cases, who had been treated with FESS alone, experienced a recurrence. In conclusion, the commonest predisposing factors for ACPs are chronic inflammatory pathologies such as chronic sinusitis and allergic rhinitis. ACP left the maxillary sinus via an accessory ostium in 97.5 % of the cases. The FESS procedure is a safe and reliable method, and can be combined with the Caldwell Luc procedure when the origin of the maxillary component cannot be properly cleaned. In order to prevent recurrence, total extirpation of the maxillary component is essential.

Eur Arch Otorhinolaryngol. 2013 May;270(5):1651-4.

8. Syndromes of invasive fungal sinusitis.

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Abstract

Invasive fungal sinusitis should be suspected in immunocompromised or diabetic patients who present with acute sinusitis, inflammation of nasal septal mucosa, unexplained fever or cough, or the orbital apex syndrome. Histopathological studies are required to differentiate among these syndromes. Acute (fulminant) invasive fungal sinusitis has been called mucormycosis, zygomycosis and fulminant invasive sinusitis. Fever, cough, crusting of nasal mucosa, epistaxis, and headache are the most common presenting symptoms. Histopathological studies show hyphal invasion of blood vessels, vasculitis with thrombosis, and tissue infarction. Reports of granulomatous invasive fungal sinusitis come primarily from Sudan, but also from India, Pakistan, and the United States. Patients usually present with proptosis, appear to be immunocompetent and are infected almost exclusively with A. flavus. Chronic invasive fungal sinusitis can be distinguished from the two other forms of invasive fungal sinusitis by its chronic course, dense accumulation of hyphae resembling a mycetoma, and association with the orbital apex syndrome, diabetes mellitus, and corticosteroid treatment. Biopsy and orbital exploration show vascular invasion by fungal elements and only a sparse chronic inflammatory infiltrate.

Med Mycol. 2009;47 Suppl 1:S309-14

9. Unusual presentation of sporadic Burkitt's lymphoma originating from the nasal septum: a case report.

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Abstract

INTRODUCTION:

Burkitt's lymphoma is a highly aggressive, small, non-cleaved B-cell non-Hodgkin's lymphoma. In the sporadic form of the disease that occurs in non-endemic areas around the world, most commonly in developed countries, patients usually present with an abdominal mass that frequently involves the ileocecal region of the bowel; ocular or orbital involvement is rare. Primary disease of the sinuses is uncommon and, to the best of our knowledge, that of the anterior septum has never been described. We report the diagnosis and successful management of Burkitt's lymphoma originating from the nasal septum in a male patient.

CASE PRESENTATION:

An otherwise healthy 78-year-old Caucasian man who did not smoke cigarettes was admitted to our Ear, Nose and Throat outpatient clinic with the complaint of nasal obstruction due to left-sided nasal septal thickening. Paranasal computerized tomography revealed a well-circumscribed solid mass originating from his anterior nasal septum and obstructing his airway. The final diagnosis of Burkitt's lymphoma was verified by immunohistochemical studies. Our patient had a good clinical outcome after chemoradiotherapy, with no problems reported to date in the second year of follow-up.

CONCLUSION:

We provide what we believe to be the first report of a case of sporadic Burkitt's lymphoma involving the nasal septum, and describe the efficacy of first-line chemotherapy. Being an original case report with broader clinical impact across more than one area of medicine, this case presentation has the potential to significantly advance our understanding of Burkitt's lymphoma and we emphasize the need to include this disease in the differential diagnosis of patients presenting with a nasal septal mass

J Med Case Rep. 2013 Mar 8; 7(1):60

10. Paranasal sinus osteoma: is there any association with anatomical variations?

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Abstract

BACKGROUND:

Developmental disturbances of the paranasal sinuses are proposed as the cause of osteoma. We examined whether such disturbances may result in the frequent presence of anatomical variations of the paranasal sinuses in patients with osteoma.

METHODOLOGY/PRINCIPAL:

The study was performed retrospectively on 2,820 patients subjected to CT examination during 2005 - 2011. Demographic and CT characteristics of osteoma, and associated pathological findings were evaluated for 104 patients with diagnosed osteoma. The presence of anatomical variations was assessed for 51 osteoma patients with a complete medical history, and for 1,233 patients from a control group.

RESULTS:

The prevalence of osteomas was found to be 3.69%, with male to female ratio 1.08:1. The frontal sinus was most commonly affected. The presence of anatomical variations was more frequent in patients with osteoma than in controls, with significant differences confirmed for the sphenomaxillary plate, infraorbital cell, and crista galli pneumatization.

CONCLUSIONS:

The paranasal sinus osteoma is associated with higher prevalence of anatomical variations. This can be explained either by the stronger influence of genetic and/or environmental factors on the development of the paranasal sinuses in patients with osteoma, or by their higher susceptibility to above mentioned factors.

Rhinology. 2013 Mar;51(1):54-60