Çocuklarda Olgularla Ağır Astım Yönetimi: Konvansiyonel Tedaviler

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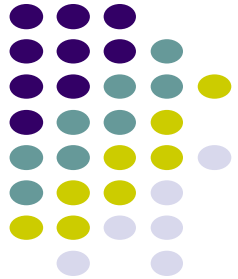
Çocuklar erişkinlerden farklıdır



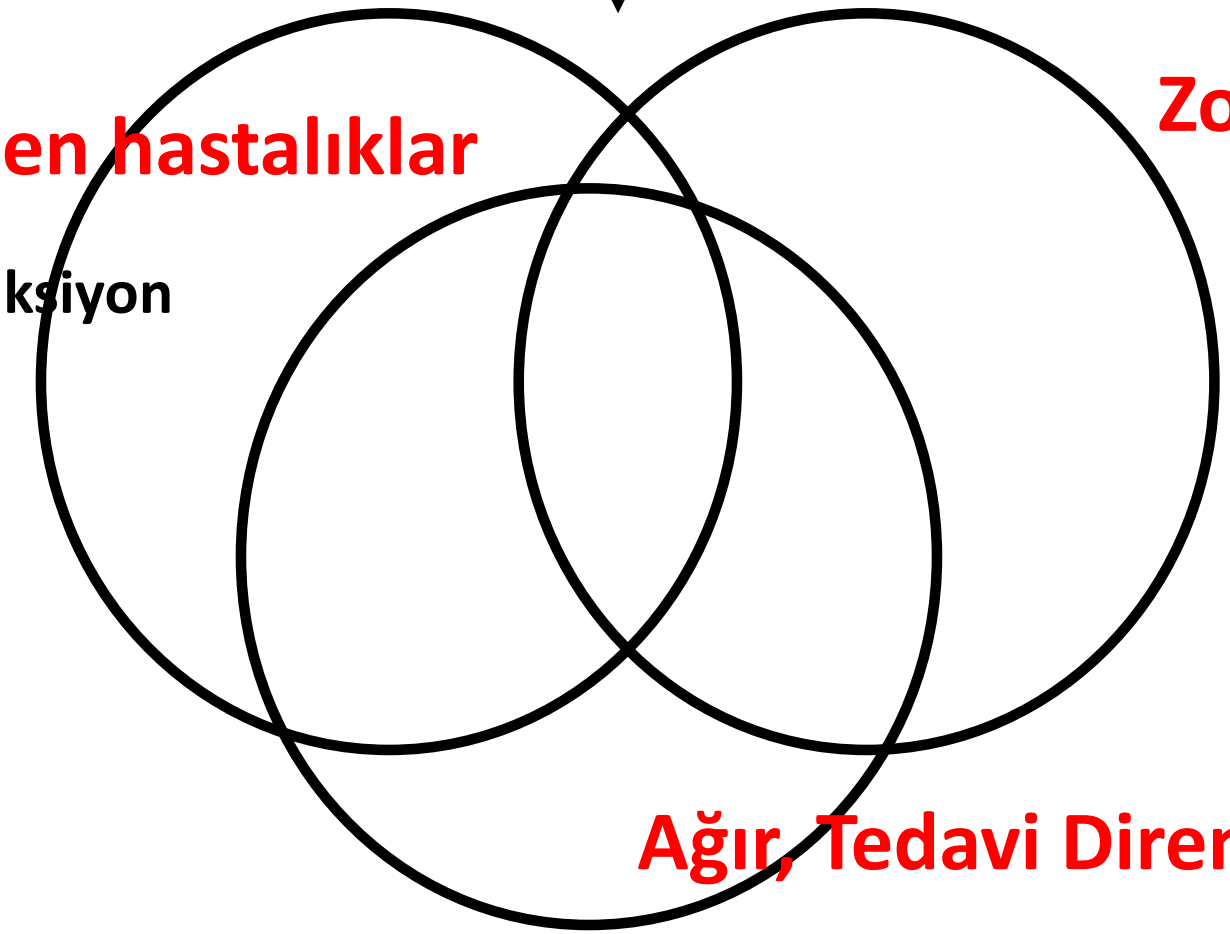
- Sık ataklarla karakterize
- Tedaviye cevapları farklı
- Akciğerler büyümeye devam ediyor
- Büyüme ve kemik matürasyonu devam ediyor: Tedavide önemli
- Küçük havayolları daha çok etkilenebilir
- Adölesanlar ağır astım için özel olarak riskli gruptur

Astım tedavisine cevap vermeyen ağır problemli semptomlar

Astım?

Hayır? → Yeni tanı

Evet



Astıma eşlik eden hastalıklar

1. Larengial obstrüksiyon
2. Vokal kord disf
3. Obezite
4. Rinosinüzit
5. Besin Alerjisi
6. GÖRH

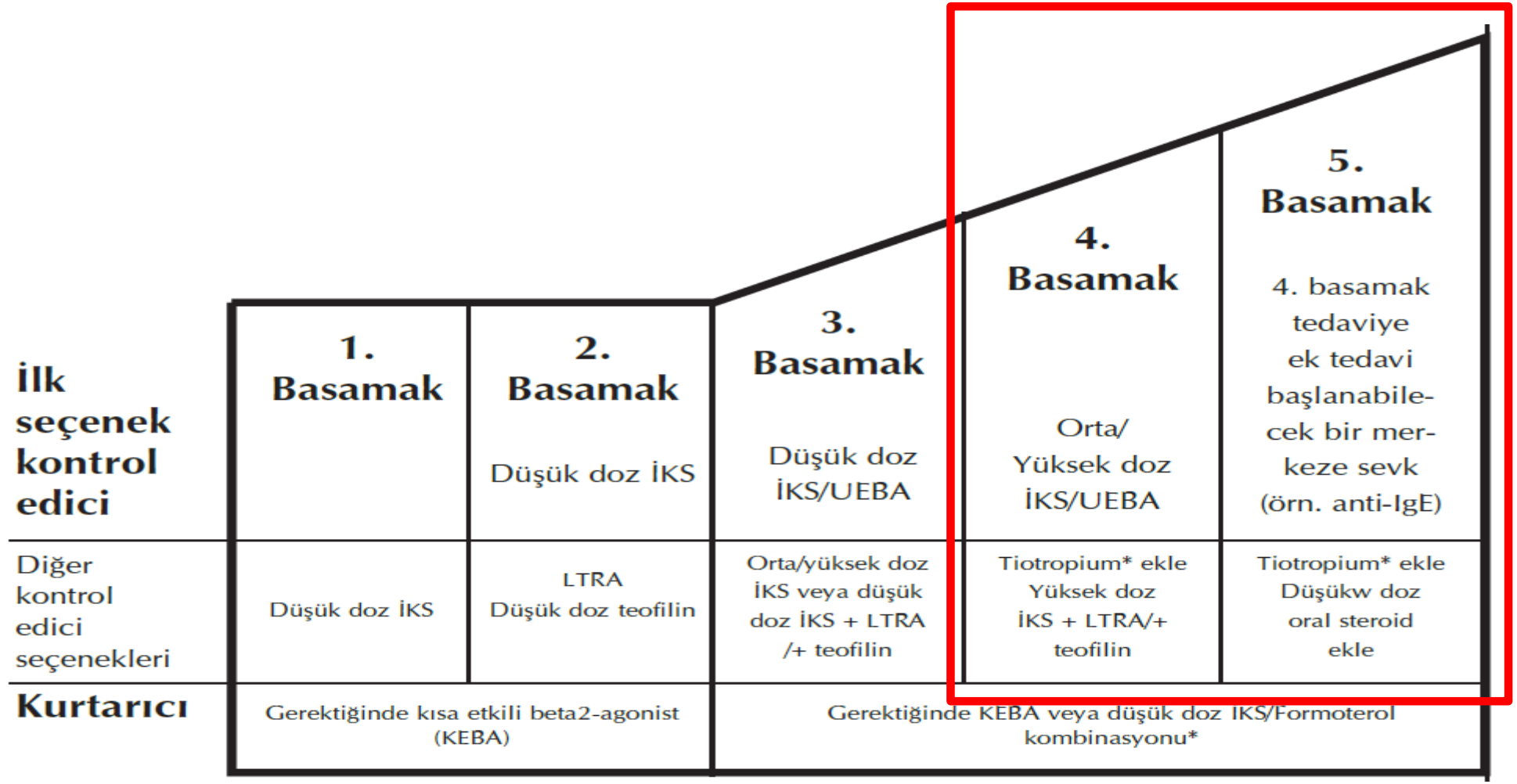
Zor Astım

1. İlaca uyum
2. Alerjenden kaçınma
3. Nikotin maruziyeti
4. Psikososyal sorunlar

Ağır, Tedavi Dirençli Astım

Respirology (2017) **22**, 886–897

Ağır Astım: GINA tanımı



	1. Basamak	2. Basamak	3. Basamak	4. Basamak	5. Basamak
İlk seçenek kontrol edici		Düşük doz İKS	Düşük doz İKS/UEBA	Orta/ Yüksek doz İKS/UEBA	4. basamak tedaviye ek tedavi başlanabilecek bir merkeze sevk (örn. anti-IgE)
Diğer kontrol edici seçenekleri	Düşük doz İKS	LTRA Düşük doz teofilin	Orta/yüksek doz İKS veya düşük doz İKS + LTRA /+ teofilin	Tiotropium* ekle Yüksek doz İKS + LTRA/+ teofilin	Tiotropium* ekle Düşükw doz oral steroid ekle
Kurtarıcı	Gerektiğinde kısa etkili beta2-agonist (KEBA)		Gerektiğinde KEBA veya düşük doz IKS/Formoterol kombinasyonu*		

Hangi Doz Steroid Yüksek

TABLE I. High-dose ICD dosages for children (μg/d)

Drug name	US brand name	Guidelines			Guidelines		
		ATS/ERS (6-12 y)	GINA (6-11 y)	NAEPP (5-11 y)	ATS/ERS (>12 y)	GINA (≥12 y)	NAEPP (≥12 y)
Beclomethasone dipropionate (HFA)	Qvar	≥320	>200	≥320	≥1000	>400	>480
Budesonide (DPI)	Pulmicort Flexhaler	≥800	>400	≥800	≥1600	>800	>1200
Budesonide (nebules)	Pulmicort Respules		>1000	≥2000			
Ciclesonide (HFA)	Alvesco	≥160	>160		≥320	>320	
Flunisolide (HFA)	Aerospan			≥640			>640
Fluticasone propionate (DPI)	Flovent Diskus Advair Diskus	≥500	>400	>400	≥1000	>500	>500
Fluticasone propionate (HFA)	Flovent Advair HFA	≥500	>500	>352	≥1000	>500	>440
Mometasone furoate (DPI)	Asmanex Twisthaler	≥500	≥440	440	≥800	>440	>400

ATS, American Thoracic Society; *DPI*, dry powder inhalers; *ERS*, European Respiratory Society; *GINA*, Global Initiative for Asthma; *HFA*, hydrofluoroalkane; *NAEPP*, National Asthma Education and Prevention Program.

J
Allergy Clin Immunol Pract 2017;5:889-98)

11 yaş 4 ay, erkek, 06.08.2015

- 1 yaşından beri tekrarlayan vizing var. İnhaler tedaviler kullanmış.
- **Şu anda düzenli ilaç kullanmıyor.**
- Her akşam nefes darlığı varmış, KEBA veriliyormuş.
- **Eforla babaya göre şikayet var çocuğa göre yok.**
- Maç sonrası göğüs ağrısı oluyor.
- **Sürekli burun tıkanıklığı , burun kaşıntısı, ağzı açık uyuma var**
- Akrabalık yok, ailede alerjik hastalık yok,
- Baba 20 yıl önce TBC olmuş, **baba evde sigara içiyor**, evcil hayvan yok, rutubet yok
- FM: Solunum sesleri doğal
- **VKI: 20,56 (Fazla kilolu) FEV1: 77-86 11 (270 ml)**
- Atopi yok, eoz %2,9, 400/mm³
- Flutikazone 100 2*1 discus nazal steroid ve antihistamine

Uyum?

Arch Dis Child. 2014 Oct;99(10):949-53. doi: 10.1136/archdischild-2014-306243. Epub 2014 May 29.

Adherence in childhood asthma: the elephant in the room.

Morton RW[1], Everard ML[2], Elphick HE[3].

Author information

Abstract

Adherence to inhaled steroids is suboptimal in many children with asthma and can lead to poor disease control. Many previous studies in paediatric populations have used subjective and inaccurate adherence measurements, reducing their validity. Adherence studies now often use objective electronic monitoring, which can give us an accurate indication of the extent of non-adherence in children with asthma. A review of the studies using electronic adherence monitoring shows that half of them report mean adherence rates of 50% or below, and the majority report rates below 75%. Reasons for non-adherence are both intentional and non-intentional, incorporating illness perceptions, medication beliefs and practical adherence barriers. Interventions to improve adherence in the paediatric population have had limited success, with the most effective containing both educational and behavioural aspects.

KEYWORDS: Child Psychology; Respiratory

PMID: 24876303 DOI: 10.1136/archdischild-2014-306243

[Indexed for MEDLINE]

Semptom algılama

Format: Abstract ▾ Send to ▾

J Asthma. 1998;35(2):137-46.

Symptom perception in asthma: a multidisciplinary review.

Rietveld S[1].

Author information

1 Department of Clinical Psychology, University of Amsterdam, The Netherlands.

Abstract

Clinical observations and research show that symptom perception in asthma is, at worst, inaccurate or often biased in two directions: (1) blunted perception, (2) overperception (both involving airway obstruction manifested in low or high breathlessness). Theoretically breathlessness occurs during respiratory labor or blood gas changes. However, pathophysiological factors and asthma severity are inconsistently related to perceptual accuracy. Consequently, symptom perception within the biomedical perspective is not well understood. Possible psychological influences, varying from the stimulus level to emotions and high-order reasoning, are discussed.

Comment in

A wheeze by any other name is (not) the same: the role of symptom perception in asthma. [J Asthma. 1998]

PMID: 9576139

[Indexed for MEDLINE]

Semptom alıgılama

Format: Abstract

Send to

J Asthma. 2000;37(7):613-24.

Poor perception of airway obstruction in children with asthma.

Baker RR[1], Mishoe SC, Zaitoun FH, Arant CB, Lucas J, Rupp NT.

Author information

Abstract

The aims of this study were to evaluate children's perception of asthma symptoms and to determine a clinically useful method for identifying poor patient perception of airway obstruction. Three methods were used to analyze the relationships among indices of lung function and perception of breathlessness in 35 children. Approximately half the children in our sample did not perceive either airway obstruction or bronchodilation. We propose that <20% improvement in visual analog scale scores post-bronchodilation may provide a simple index for identifying patients with poor perception of airway obstruction, who may be at risk for fatal or near-fatal asthma.

PMID: 11059529

[Indexed for MEDLINE]

Allerjik Rinit?

J Allergy Clin Immunol. 2017 Oct;140(4):950-958. doi: 10.1016/j.jaci.2017.03.050. Epub 2017 Jun 8.

Allergic Rhinitis and its Impact on Asthma (ARIA) guidelines-2016 revision.

Brożek JL[1], Bousquet J[2], Agache I[3], Agarwal A[4], Bachert C[5], Bosnic-Anticevich S[6], Brignardello-Petersen R[7], Canonica GW[8], Casale T[9], Chavannes NH[10], Correia de Sousa J[11], Cruz AA[12], Cuello-Garcia CA[7], Demoly P[13], Dykewicz M[14], Etxeandia-Ikobaltzeta I[15], Florez ID[16], Fokkens W[17], Fonseca J[18], Hellings PW[19], Klimek L[20], Kowalski S[7], Kuna P[21], Laisaar KT[22], Larenas-Linnemann DE[23], Lødrup Carlsen KC[24], Manning PJ[25], Meltzer E[26], Mullol J[27], Muraro A[28], O'Hehir R[29], Ohta K[30], Panzner P[31], Papadopoulos N[32], Park HS[33], Passalacqua G[34], Pawankar R[35], Price D[36], Riva JJ[37], Roldán Y[7], Ryan D[38], Sadeghirad B[39], Samolinski B[40], Schmid-Grendelmeier P[41], Sheikh A[42], Togias A[43], Valero A[44], Valiulis A[45], Valovirta E[46], Ventresca M[7], Wallace D[47], Waserman S[48], Wickman M[49], Wiercioch W[7], Yepes-Nuñez JJ[50], Zhang L[51], Zhang Y[7], Zidarn M[52], Zuberbier T[53], Schünemann HJ[54].

⊕ Author information

Abstract

BACKGROUND: Allergic rhinitis (AR) affects 10% to 40% of the population. It reduces quality of life and school and work performance and is a frequent reason for office visits in general practice. Medical costs are large, but avoidable costs associated with lost work productivity are even larger than those incurred by asthma. New evidence has accumulated since the last revision of the Allergic Rhinitis and its Impact on Asthma (ARIA) guidelines in 2010, prompting its update.

OBJECTIVE: We sought to provide a targeted update of the ARIA guidelines.

METHODS: The ARIA guideline panel identified new clinical questions and selected questions requiring an update. We performed systematic reviews of health effects and the evidence about patients' values and preferences and resource requirements (up to June 2016). We followed the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) evidence-to-decision frameworks to develop recommendations.

RESULTS: The 2016 revision of the ARIA guidelines provides both updated and new recommendations about the pharmacologic treatment of

Allerjik rinit

Pediatr Pulmonol. 2005 Sep;40(3):233-40.

Burden of rhinitis in children with asthma.

Kocabas CN[1], Civelek E, Sackesen C, Orhan F, Tuncer A, Adalioglu G, Sekerel BE.

Author information

Abstract

Although the clinical association of allergic rhinitis and asthma has been recognized for centuries, in recent years the association appears to be stronger than was reported previously. However, data for children are less clear, and some studies indicate that results observed in developing countries may differ from those observed in Western populations. We therefore intended to document the association of rhinitis with pediatric asthma in terms of caregivers' perception, physician practice, and file records. Asthmatic children aged 3-16 years with at least 1-year follow-up in an allergy-asthma outpatient clinic were invited to participate in the study during a 10-month interval. In addition to a face-to-face questionnaire-based interview, file records were evaluated retrospectively to obtain information relating to asthma and rhinitis. Of 396 patients included in the study, 369 with consistent replies were included in the analyses. The mean age of the study group was 10.6 +/- 0.2 (mean +/- SEM) years, and a greater proportion of the respondents were male (63.7%), atopic (78.3%), and mildly asthmatic (50.7%). House dust mite and grass pollens were the most commonly sensitized allergens (50.7% and 46.9%, respectively). Although only 5.4% of our study population regarded themselves as rhinitic and 23.8% had been diagnosed with allergic rhinitis according to the file records, almost 57.7% of patients had required medications for rhinitis within the last year, and 68.8% had findings consistent with allergic rhinitis. Furthermore, 41.2% and 58.8% reported that their rhinitis symptoms caused a significant burden in their daily life and exacerbated their asthma, respectively, and almost 50% felt that their rhinitis had not been given significant consideration by their physician. In conclusion, although we report a large discrepancy between caregivers' perception of rhinitis, documentation in file records, and treatments for rhinitis, the allergic rhinitis prevalence determined in the survey and the medication use for rhinitis appeared to be in agreement. We recommend a greater effort be made to identify, label, and educate children with rhinitis and their families in asthma outpatient clinics.

Fazla kilolularda semptom algılması

J Allergy Clin Immunol. 2015 Apr;135(4):886-93.e3. doi: 10.1016/j.jaci.2014.08.029. Epub 2014 Oct 14.

Overweight children report qualitatively distinct asthma symptoms: analysis of validated symptom measures.

Lang JE[1], Hossain MJ[2], Lima JJ[3].

Author information

1 Division of Pulmonary & Sleep Medicine, Nemours Children's Hospital, Orlando, Fla. Electronic address: jason.lang@nemours.org.
2 Center for Pediatric Research, Alfred I. DuPont Hospital of Children, Wilmington, Del.
3 Center for Pharmacogenomics & Translational Research, Nemours Children's Clinic, Jacksonville, Fla.

Abstract

BACKGROUND: Past studies of asthma in overweight/obese children have been inconsistent. The reason overweight/obese children commonly report worse asthma control remains unclear.

OBJECTIVE: To determine qualitative differences in symptoms between lean and overweight/obese children with early-onset, atopic asthma.

METHODS: We conducted a cross-sectional analytic study of lean (20% to 65% body mass index) and overweight/obese (≥85% body mass index) 10- to 17-year-old children with persistent, early-onset asthma. Participants completed 2 to 3 visits to provide a complete history, qualitative and quantitative asthma symptom characterization, and lung function testing. We determined associations between weight status and symptoms using multivariable linear and logistic regression methods.

RESULTS: Overweight/obese and lean asthmatic children displayed similar lung function. Despite lower fraction of exhaled nitric oxide (30.0 vs 62.6 ppb; P = .037) and reduced methacholine responsiveness (PC20FEV1 1.87 vs 0.45 mg/mL; P < .012), overweight/obese children reported more than thrice frequent rescue treatments (3.7 vs 1.1 treatments/wk; P = .0002) than did lean children. Weight status affected the child's primary symptom reported with loss of asthma control (Fisher exact test: P = .003): overweight/obese children more often reported shortness of breath (odds ratio = 11.8; 95% CI, 1.41-98.7) and less often reported cough (odds ratio = 0.26; 95% CI, 0.08-0.82). Gastroesophageal reflux scores were higher in overweight/obese children (9.6 vs 23.2; P = .003) and appear to mediate overweight/obesity-related asthma symptoms.

CONCLUSIONS: Overweight/obese children with early-onset asthma display poorer asthma control and a distinct pattern of symptoms. Greater shortness of breath and ß-agonist use appears to be partially mediated via esophageal reflux symptoms. Overweight children with

Sigara

PLoS One. 2017 Mar 31;12(3):e0174541. doi: 10.1371/journal.pone.0174541. eCollection 2017.

Exposure to secondhand smoke and asthma severity among children in Connecticut.

Hollenbach JP[1,2], Schifano ED[3], Hammel C[4], Cloutier MM[1,2].

Author information

Abstract

OBJECTIVE: To determine whether secondhand smoke (SHS) exposure is associated with greater asthma severity in children with physician-diagnosed asthma living in CT, and to examine whether area of residence, race/ethnicity or poverty moderate the association.

METHODS: A large childhood asthma database in CT (Easy Breathing) was linked by participant zip code to census data to classify participants by area of residence. Multinomial logistic regression models, adjusted for enrollment date, sex, age, race/ethnicity, area of residence, insurance type, family history of asthma, eczema, and exposure to dogs, cats, gas stove, rodents and cockroaches were used to examine the association between self-reported exposure to SHS and clinician-determined asthma severity (mild, moderate, and severe persistent vs. intermittent asthma).

RESULTS: Of the 30,163 children with asthma enrolled in Easy Breathing, between 6 months and 18 years old, living in 161 different towns in CT, exposure to SHS was associated with greater asthma severity (adjusted relative risk ratio (aRRR): 1.07 [1.00, 1.15] and aRRR: 1.11 [1.02, 1.22] for mild and moderate persistent asthma, respectively). The odds of Black and Puerto Rican/Hispanic children with asthma being exposed to SHS were twice that of Caucasian children. Though the odds of SHS exposure for publicly insured children with asthma were three times greater than the odds for privately insured children (OR: 3.02 [2.84,3,21]), SHS exposure was associated with persistent asthma only among privately insured children (adjusted odds ratio (aOR): 1.23 [1.11,1.37]).

CONCLUSION: This is the first large-scale pragmatic study to demonstrate that children exposed to SHS in Connecticut have greater asthma severity, clinically determined using a systematic approach, and varies by insurance status.

Adölesanlarda sigara

Türkiye’de lise öğrencilerinin yaklaşık 1/3 sigara içiyor

Küresel gençlik tütün araştırması,2003

3 ay sonra, 23.10.2015

Flutikazone 100 2x1 nazal streoid ve AH kullanıyor

Geceleri öksürük var, Eforla öksürük var

Burun tıkanıklığı var, ağzı acık uyuması horlaması var

FM: Bazallerde ronkusleri var

FEV1:74 ...79 %7

Montelukast 5 mg eklendi .

15 ay sonra, 04.11.2016

1 yıldır takibe gelmiyor

Flutikazone 100 mcg ve Montelukast 4-5 aydır kullanmıyor,

Gündüz öksürük +, gece öksürük +, eforla öksürük +

Burun akıntısı,burun tıkanıklığı,hapşırık +

Dün nefes darlığı,göğüs ağrısı başlamış o yüzden kontrole gelmiş

FM: Tonsiller hiperemik ,seropüürlan PNA +

Takipne retraksiyon yok

Ekspiryum uzun zorlu yaygın ronküs

FEV 1: % 73/76

Atak Tedavisi: KIBA, OKS, Antikolinerjik, oral CAM

İdame tedavi: Flutikazone 100 mcg 2*2 ve montelukast

Uyum?

Arch Dis Child. 2014 Oct;99(10):949-53. doi: 10.1136/archdischild-2014-306243. Epub 2014 May 29.

Adherence in childhood asthma: the elephant in the room.

Morton RW[1], Everard ML[2], Elphick HE[3].

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KEYWORDS: Child Psychology; Respiratory

PMID: 24876303 DOI: 10.1136/archdischild-2014-306243

[Indexed for MEDLINE]

3 hafta sonra, 23.11.2016

Klaritromisin 10 gün kullanmış.
Montelukast 5 mg ve Flutikazone 100 mcg 2*2 kullanıyor.
FM: Sağ akciğer bazalde ronkus
FEV1:80--84(5)
KEBA sonrası ronkus yok.
Göğüs hast kons(macrol ve oral cam tedavisine rağmen düzelmeyen dinleme bulguları)
Flutikzone 250 mcg 2*1 başlandı.
Montelukast devam

2 ay sonra; 13.01.2017

Montelukast ve Flutikazone 250 mcg 2x1 nazal steroid kullanıyor.

Son 1 ay içinde ventolin ihtiyacı ara ara olmuş.acile başvuru yok.

Şu an nefes darlığı var.

FM: Bilateral ekspiryum uzun ve zorlu

SFT: FEV1: %70

İdame tedavi:

Kombine (FLU 250+SAL 50) 2*1 ve montelukast

Antihistaminik ve nazal steroid .

Gastroenteroloji kons.

KBB konsültasyonu

1 ay sonra, 22.02.2017

(FLU 250+SAL 50) 2*1

Montelukast 5 mg 1*1

İnhaleri aracı tüpsüz kullanmış

KEBA (son 1 ayda 19 defa kullanmış)

İlaç kullanım tekniği

[Original Research **Respiratory Care**]

CHEST

Systematic Review of Errors in Inhaler Use

Has Patient Technique Improved Over Time?

Joaquin Sanchis, MD, PhD; Ignasi Gich, MD, PhD; and Soren Pedersen, MD, PhD, Dr Med Sci; on behalf of the Aerosol Drug Management Improvement Team (ADMIT)

İlaç kullanım tekniği

3 ay sonra, 08.05.2017

(FLU 250+SAL 50) 2*1 ve montelukast düzenli kullanıyor

Lansaprazol alıyor 2 aydır

Nazal steroid ve AH Alıyor

Son 1 aydır şikayeti olmamış

Bisiklet sürerken daha rahatmış.

GÖRH

Pediatrics. 2010 Apr;125(4):e925-30. doi: 10.1542/peds.2009-2382. Epub 2010 Mar 29.

Gastroesophageal reflux and asthma in children: a systematic review.

Thakkar K[1], Boatright RO, Gilger MA, El-Serag HB.

Author information

Abstract

CONTEXT: The relationship between gastroesophageal reflux disease (GERD) and asthma in children has been investigated; however, the nature of the association (if any) between these 2 conditions is unclear.

OBJECTIVE: We performed a systematic review of the literature to examine the association between GERD and asthma in children.

METHODS: A search of the medical literature was conducted by using PubMed and Embase (1966 through December 2008). Full-length articles in English that described at least 20 subjects younger than 18 years were included if they reported the prevalence of GERD (symptoms, pH studies, endoscopy/histology) in individuals with asthma or the prevalence of asthma in individuals with GERD. We calculated pooled odds ratios from studies that examined control groups, and we pooled prevalence estimates from all studies.

RESULTS: A total of 20 articles that described 5706 patients fulfilled the inclusion and exclusion criteria. Seventeen studies used objective methods for documenting reflux (eg, pH probe, contrast imaging, impedance, esophagogastroduodenoscopy), 2 studies relied on symptom-based questionnaires, and 1 study used diagnostic codes. Most studies (n = 19) examined the prevalence of GERD in 3726 individuals with asthma and reported highly variable estimates (19.3%-80.0%) and a pooled average of 22.8% with GERD symptoms, 62.9% of 789 patients with abnormal esophageal pH, and 34.8% of 89 patients with esophagitis. Only 5 studies included controls and enrolled 1314 case-patients with asthma and 2434 controls without asthma. The average prevalence of GERD was 22.0% in asthma cases and 4.8% in controls (pooled odds ratio: 5.6 [95% confidence interval: 4.3-6.9]).

CONCLUSIONS: There is a possible association between GERD and asthma in pediatric patients seen with asthma in referral settings. However, because of methodologic limitations of existing studies, the paucity of population-based studies, and a lack of longitudinal studies, several aspects of this association are unclear.

2 ay sonra, 18.07.2017

(FLU 250+SAL 50) (1 hafta ilacı kesmiş) şu an kullanıyor

3 ay lansaprazol kullanmış

Eforla yakınması yok

Gece gündüz öksürük yok

Burun tıkanıklığı yokmuş

GÖRH semptomu yok

FM:solunum sesleri doğal

Montelukast kesildi

2 ay sonra, 14.09.2017

Flutikazone + salmeterol 250 2x1 kullanıyor.

sft:fvc:77 fev1:77 fev1/fvc:85

fm:bilateral ronküs

montelukast eklenecek.

nasal ks

8 ay sonra, 11.04.2018

İdame devam

son kontrolden bu yana şikayeti olmamış

acile başvurusu olmamış

Plan:

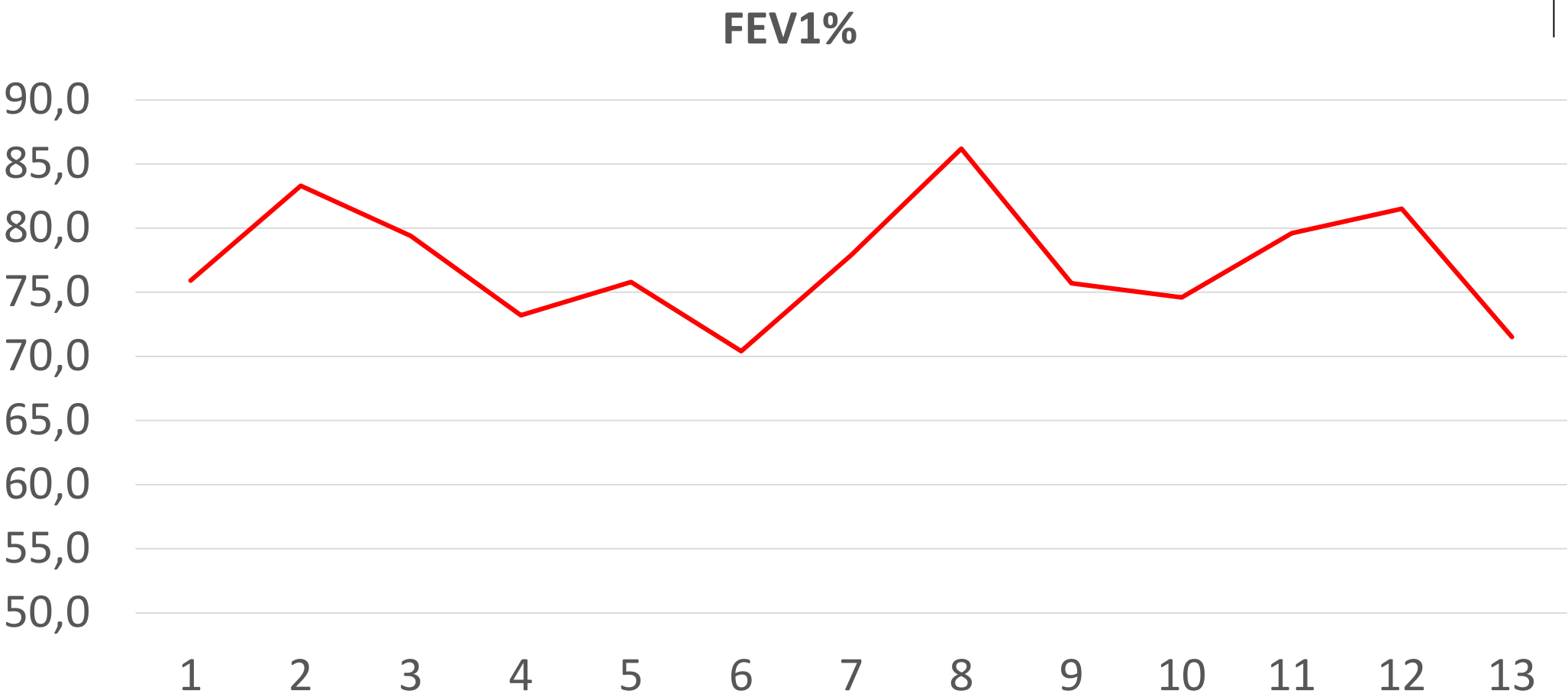
Flutikazone + salmeterol 250 2x1

Montelukast

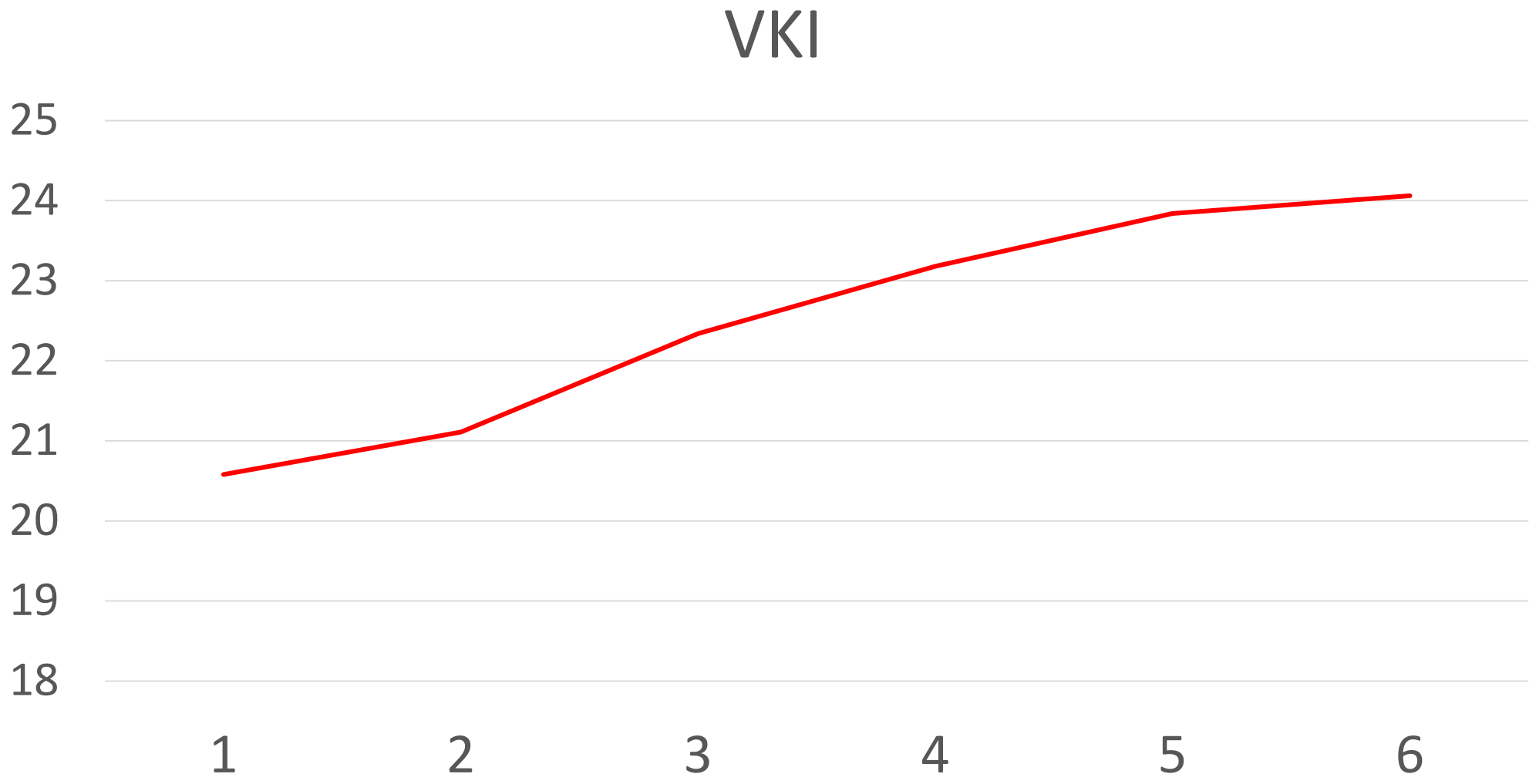
Nazal steroid

Antihistamine

SFT: FEV1



Vücut Kitle İndeksi



Obezite-Ağır Astım

Chest. 2013 Feb 1;143(2):406-414. doi: 10.1378/chest.12-0872.

Obesity-associated severe asthma represents a distinct clinical phenotype: analysis of the British Thoracic Society Difficult Asthma Registry Patient cohort according to BMI.

Gibeon D[1], Batuwita K[2], Osmond M[2], Heaney LG[3], Brightling CE[4], Niven R[5], Mansur A[6], Chaudhuri R[7], Bucknall CE[8], Rowe A[2], Guo Y[2], Bhavsar PK[9], Chung KF[1], Menzies-Gow A[10].

Author information

Abstract

BACKGROUND: Obesity has emerged as a risk factor for the development of asthma and it may also influence asthma control and airway inflammation. However, the role of obesity in severe asthma remains unclear. Thus, our objective was to explore the association between obesity (defied by BMI) and severe asthma.

METHODS: Data from the British Thoracic Society Difficult Asthma Registry were used to compare patient demographics, disease characteristics, and health-care utilization among three BMI categories (normal weight: 18.5-24.99; overweight: 25-29.99; obese: 30) in a well-characterized group of adults with severe asthma.

RESULTS: The study population consisted of 666 patients with severe asthma; the group had a median BMI of 29.8 (interquartile range, 22.5-34.0). The obese group exhibited greater asthma medication requirements in terms of maintenance corticosteroid therapy (48.9% vs 40.4% and 34.5% in the overweight and normal-weight groups, respectively), steroid burst therapy, and short-acting b 2 -agonist use per day. Significant differences were seen with gastroesophageal reflux disease (53.9% vs 48.1% and 39.7% in the overweight and normal weight groups, respectively) and proton pump inhibitor use. Bone density scores were higher in the obese group, while pulmonary function testing revealed a reduced FVC and elevated carbon monoxide transfer coefficient. Serum IgE levels decreased with increasing BMI and the obese group was more likely to report eczema, but less likely to have a history of nasal polyps.

CONCLUSIONS: Patients with severe asthma display particular characteristics according to BMI that support the view that obesity-associated severe asthma may represent a distinct clinical phenotype.

Kilo verme ve astım

Am J Respir Crit Care Med. 2017 Jan 1;195(1):32-42. doi: 10.1164/rccm.201603-0446OC.

The Role of Exercise in a Weight-Loss Program on Clinical Control in Obese Adults with Asthma. A Randomized Controlled Trial.

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⊕ Author information

Abstract

RATIONALE: Clinical control is difficult to achieve in obese patients with asthma. Bariatric surgery has been recommended for weight loss and to improve asthma control; however, the benefits of nonsurgical interventions have been poorly investigated.

OBJECTIVES: To examine the effect of exercise training in a weight-loss program on asthma control, quality of life, inflammatory biomarkers, and lung function.

METHODS: Fifty-five obese patients with asthma were randomly assigned to either a weight-loss program plus exercise (WL + E group, n = 28) or a weight-loss program plus sham (WL + S group, n = 27), where the weight-loss program included nutrition (caloric restriction) and psychological therapies. The WL + E group incorporated aerobic and resistance muscle training, whereas the WL + S group incorporated breathing and stretching exercises.

MEASUREMENTS AND MAIN RESULTS: The primary outcome was clinical improvement in asthma control over 3 months. Secondary outcomes included quality of life, lung function, body composition, aerobic capacity, muscle strength, and inflammatory/antiinflammatory biomarkers. After 3 months, 51 patients were analyzed. Compared with the WL + S group, the WL + E group demonstrated improved clinical control scores (median [25th to 75th percentile], -0.7 [-1.3 to -0.3] vs. -0.3 [-0.9 to 0.4]; P = 0.01) and greater weight loss (mean ± SD, -6.8% ± 3.5 vs. -3.1% ± 2.6; P < 0.001) and aerobic capacity (median [25th to 75th percentile], 3.0 [2.4 to 4.0] vs. 0.9 [-0.3 to 1.3] ml $O_2 \times kg^{-1} \times min^{-1}$; P < 0.001). These improvements in the WL + E group were also accompanied by improvements in lung function, antiinflammatory biomarkers, and vitamin D levels, as well as reductions in airway and systemic inflammation.

CONCLUSIONS: Adding exercise to a short-term weight-loss program should be considered as a useful strategy for achieving clinical control of asthma in obese patients. Clinical trial registered with www.clinicaltrials.gov (NCT 02188940).

Uyku ilişkili solunum bozuklukları

J Asthma. 2017 May;54(4):403-410. doi: 10.1080/02770903.2016.1220012. Epub 2017 Jan 6.

The frequency of sleep-disordered breathing in children with asthma and its effects on asthma control.

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Abstract

BACKGROUND: The presence of sleep-disordered breathing (SDB) in children with asthma may cause difficult to control asthma.

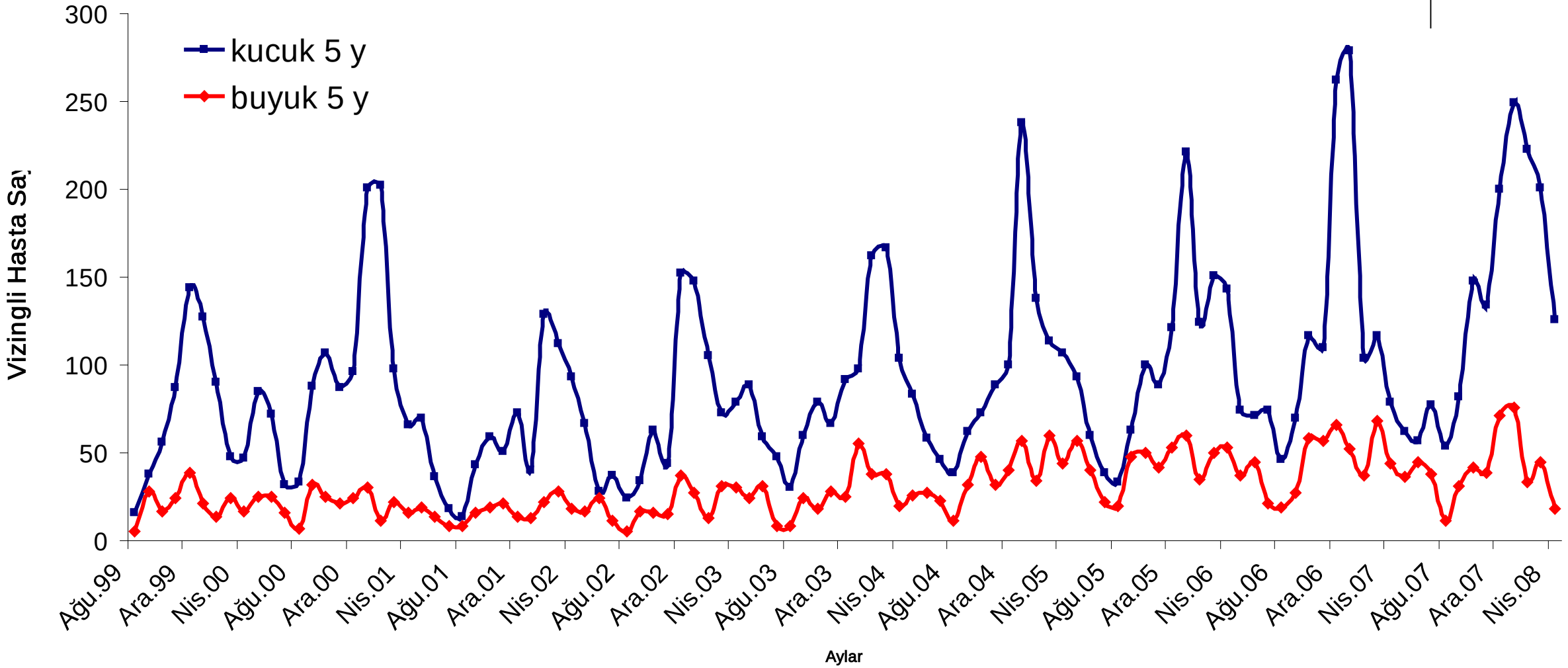
OBJECTIVES: The aim of this study was to determine the frequency of SDB in children with asthma, to evaluate its effects on asthma control and to assess the risk factors associated with the presence of SDB.

METHODS: Parents of children who Sleep Questionnaire (PSQ) and the Childhood Asthma Control Test (C-ACT). Asthma control level was assessed according to Global Initiative for Asthma (GINA). Same ear-nose-throat (ENT) specialist evaluated all patients. A 4-point tonsil grading method and adenoid-nasopharynx ratio were used to categorize tonsil and adenoid size, respectively.

RESULTS: A total of 408 children (275 male, 67.4%) with a mean age of 8.1 ± 3.2 years were included. Nearly 40% of asthmatic children were not-well-controlled according to GINA and 34.6% of all patients had SDB according to PSQ. Multivariate logistic regression analysis revealed that coexistence of SDB [OR: 6.62, 95% CI (4.21-10.41); $p < 0.001$)] and tonsillar hypertrophy [OR: 3.47; 95% CI (1.05-11.5); $p < 0.041$] were independent risk factors for not-well-controlled asthma in asthmatic children after other established contributors to asthma control were adjusted.

CONCLUSIONS: Our study showed that SDB is a strong risk factor for not-well-controlled asthma in asthmatic children independent of other confounders. In addition, tonsillar hypertrophy may have a role in the association between SDB and not-well-controlled asthma in childhood.

Enfeksiyonlar-Mevsimler



Basamak yükseltme

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MARCH 18, 2010 VOL. 362 NO. 11

Step-up Therapy for Children with Uncontrolled Asthma Receiving Inhaled Corticosteroids

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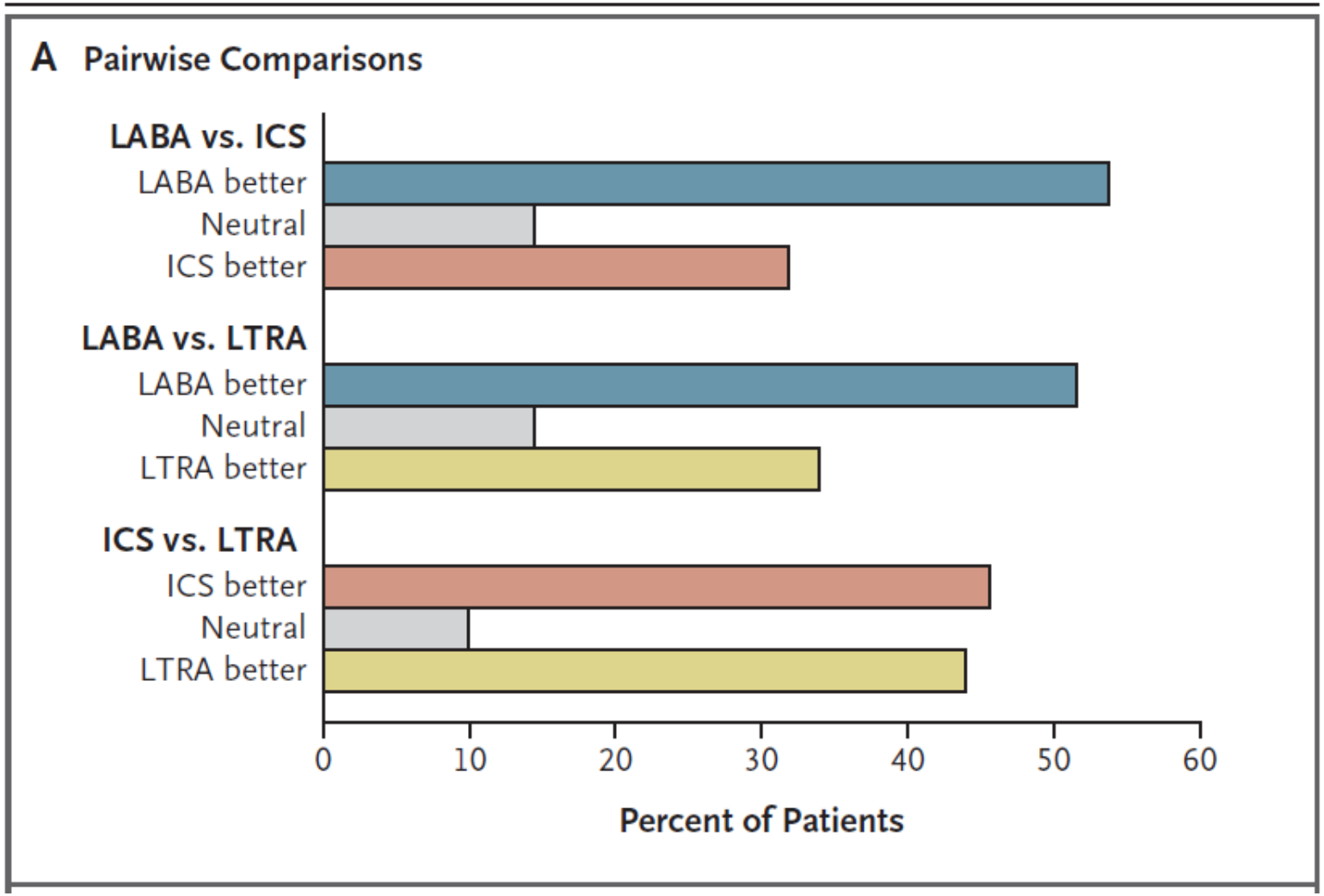
Basamak yükseltme



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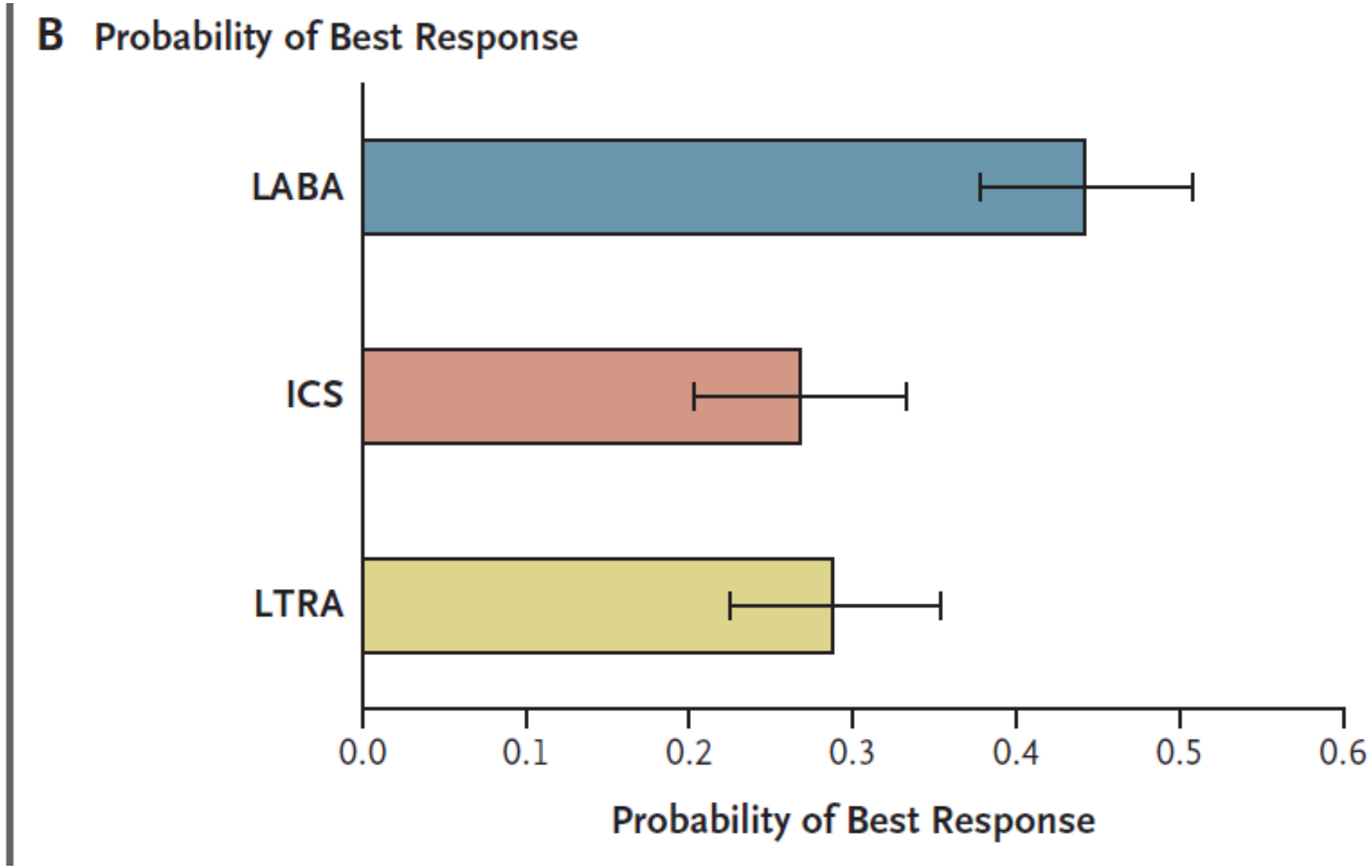

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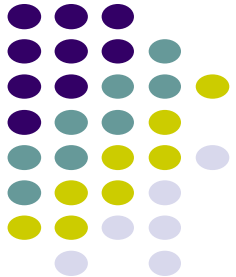

CONCLUSIONS

Nearly all the children had a differential response to each step-up therapy. LABA step-up was significantly more likely to provide the best response than either ICS or LTRA step-up. However, many children had a best response to ICS or LTRA step-up therapy, highlighting the need to regularly monitor and appropriately adjust each child's asthma therapy. (ClinicalTrials.gov number, NCT00395304.)

ORIGINAL ARTICLE
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Carin Jorup[1], Dan Lythgoe[2] and Hans Bisgaard[3]

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Tiotropium add-on therapy in adolescents with moderate asthma: A 1-year randomized controlled trial

Eckard Hamelmann, MD,[a] Eric D. Bateman, MD,[b] Christian Vogelberg, MD,[c] Stanley J. Szefler, MD,[d] Mark Vandewalker, MD,[e] Petra Moroni-Zentgraf, MD,[f] Mandy Avis, PhD,[g] Anna Unseld, MSc,[h] Michael Engel, MD,[f] and Attilio L. Boner, MD[i]

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- İlaca ve hastalığa uyum
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