

ÇOCUK GÖĞÜS HASTALIKLARI

3. KONGRESİ

26 - 28 Eylül 2018
Marriott Hotel, Şişli - İSTANBUL



ÜSYE TEDAVİ GÜNCELLEMELERİ

UZM. DR. CEM MURAT BAL
KARTAL EĞİTİM VE ARAŞTIRMA HASTANESİ
PED.GÖĞÜS ÜNİTESİ

SUNU PLANI

- SOĞUK ALGINLIĞI
- STREPTOKOKSİK FARANJİT
- AKUT OTİTİS MEDIA
- AKUT BAKTERİYEL RİNOSİNÜZİT
- EPIGLOTTİT
- CRUP
- BAKTERİYEL TRAKEİT
- DERİN BOYUN ABSE

SOĞUK ALGINLIĞI

I love doctors- they are dears;
But must they spend such years and years
Investigating such a lot
Of illness which no one's got,
When everybody, youn and old
Is frantic with the common cold?
And I will eat my only hat
If they know anything of that
Sir Alan Patrick Herbert (1890-1971)



SOĞUK ALGINLIĞI

CME


REVIEW

CMAJ

Prevention and treatment of the common cold: making sense of the evidence

G. Michael Allan MD, Bruce Arroll MB ChB PhD

- 1.Önleyici tedaviler
- 2.Farmakolojik tedaviler
- 3.Alternatif Tıp

| Intervention | and dose | Evidence | Risk of bias | Outcome | Harms | Comment |
|-------------------------------------|---|---|---|--|-----------------------------|--------------------|
| Physical intervention ³⁰ | El yıkama alkol bazlı el dez. eldiven ve maske | 67 farklı cal. | yüksek | genel olarak  | N95 daha etkili | faydalı ob |
| Zinc supplement ³¹⁻³³ | Cinko sulfat 10-15 mg | 2 RKC | yüksek | 5-7 olan soğuk alg sayısı 0,5-1,4 azalma | haf. gis.rah | faydalı |
| Probiotics ³⁴⁻³⁶ | Farklı organizma Kombin. form. | 10 RKC | ilimli | soğuk algınlığı say > 1 azalma | yok | faydalı |
| Gargling ³⁷ | Cesme suyu 20 ml' 15 sn' 3 kez | RKC | düşük | soğuk alg.say. azaltıyor | Yok | faydalı |
| Ginseng ³⁸⁻⁴⁰ | North American ginseng as COLD-FX brand in 5 of 6 RCTs (400 mg generally); Asian ginseng as Ginsana G115 brand | Systematic review (5 RCTs; <i>n</i> = 747) and single RCT (<i>n</i> = 783) | High (multiple variations of analysis) | Pooled analysis of 5 RCTs: no significant reduction in colds (relative risk 0.70, 95% CI 0.48 to 1.02); results of RCTs were inconsistent (<i>I</i> ² = 68%) Analysis of single RCT: no significant difference from placebo (<i>p</i> = 0.23) | No consistent difference | Unclear benefit |
| Exercise ⁴¹ | 45 min of moderate- intensity exercise 5 d/wk | RCT (<i>n</i> = 115 overweight or obese postmenopausal women) | High (unclear allocation concealment and equivocal findings) | Significantly fewer self- reported colds per person- year in intervention group (0.55 v. 0.96 in control group, <i>p</i> = 0.02); no difference in URTIs between groups (<i>p</i> = 0.16) | Not reported | Unclear benefit |

| Intervention | Formulation and dose | Evidence | Risk of bias | Outcome | Harms | Comment |
|------------------------------------|--|---|--|---|--|---|
| Garlic supplement ^{42,43} | Allicin powder 180 mg | Meta-analysis (1 RCT; $n = 146$) | High (1 trial had unclear allocation concealment) | 73 participants in each group; over 90-d period, 24 colds in intervention group v. 65 in control group ($p < 0.001$); unclear how many had no colds | Not reported (other than 4 taking garlic and 1 taking placebo having a smell when burping) | Unclear benefit |
| Homeopathy ⁴⁴⁻⁴⁶ | Multiple different treatments | 3 RCTs ($n = 170$, 142 and 199 children, respectively, aged ≤ 10 yr) | Moderate (2 trials had 15%–23% drop out before first dose; 1 was nonblinded) | 2 placebo-controlled RCTs: no significant effect; 1 RCT with wait-list control showed reduced symptoms and days ill | 1 of 3 RCTs reported adverse events; 22% had mild and transient adverse effects, but control group not mentioned | Unclear (likely no) benefit |
| Vitamin C ⁴⁷ | Vitamin C 0.2–3 g/d (1 g/d most common) | Meta-analysis (29 RCTs; $n = 11\ 306$) | Unclear (reviewers used blinding as surrogate of allocation concealment) | Community participants: no effect (RR 0.97, 95% CI 0.94 to 1.00); participants exposed to cold or heavy physical stress: fewer colds (RR 0.48, 95% CI 0.35 to 0.64). Duration shorter than with placebo (mean difference –9.1%, 95% CI –12.6% to –5.6%). Effect not better with higher dose | None reported | No benefit (no meaningful benefit in the average patient) |
| Vitamin D ^{48,49} | Vitamin D 400 IU daily; 200 000 IU monthly for 2 mo, then 100 000 monthly | 2 RCTs ($n = 164$ male military recruits, 322 health workers or students) | Moderate (high risk of bias in one trial, low risk in the other trial) | No consistent benefit | Likely none | No benefit |
| Echinacea ⁵⁰ | <i>Echinacea purpurea</i> , <i>E. angustifolia</i> (pressed juice or extract in different dilutions and volumes) | Systematic review (2 RCTs; $n = 519$) | Low | 3 comparisons, not pooled: none showed statistical difference from placebo in preventing colds | No significant difference from placebo | No benefit |

Table 2 (part 1 of 2): Pharmacologic interventions for the treatment of the common cold

| Intervention | Formulation and dose | Evidence | Risk of bias | Outcome | Harms | Comment |
|--|--|--------------|--------------|---|------------------------------|---------------------------|
| Antihistamine, monotherapy ^{51,52} | Various antihistamines | 2 metaanaliz | orta | Tüm semp. Skoru iyileşme yok, subjektif rinorede azalma | sedasyon | Klinik etkisi yok |
| Antihistamine, combination therapy ⁵³ | Antihistamine plus decongestant or analgesic or both | metaanaliz | yüksek | Semp.skor düzelme | Uyku boz Ağız kuru. | Büy.çoc .fay |
| Decongestant ⁵⁴⁻⁵⁷ | Oral phenylephrine and topical nasal decongestant | 3 metaanaliz | yüksek | Naz.havayol. Direnc istat.azl. ama klin. önem yok | Uykusuzluk | Klinik önem olmayan fayda |
| Intranasal ipratropium ⁵⁸ | Ipratropium 42-168 µg (1-2 sprays 3-4 times per day) | | | Rinore fayda | Burun kana. burun/agiz kuru. | |

Table 2 (part 2 of 2): Pharmacologic interventions for the treatment of the common cold

| Intervention | Formulation and dose | Evidence | Risk of bias | Outcome | Harms | Comment |
|---|---|---|---|--|--|--|
| Over-the-counter cough treatments ⁵⁸ | Antitussif Antihistamin Mukolitik ekspek | metaanaliz | Yüksek | Çoc. Fayda yok Yetişk. komb.tutarsız | Inconsistently reported | No benefit in children; benefit unclear (but likely small) in adults |
| Vapour rub ⁵⁹ | 5–10 mL rubbed on chest and neck one night | RKÇ | Orta | Çoc./aile uykusunda iyi. | Cild/göz nazal yanma | Unclear benefit, but harms present |
| NSAID ⁶⁰ | 7 different NSAIDs used (ibuprofen most common) | Meta-analysis (9 RCTs; <i>n</i> = 1069 adults) | Moderate (main limitation was missing information on randomization) | No improvement in duration of cold, overall symptoms or most respiratory symptoms; improvement in some pain areas (ear, muscles, headache) but not sore throat | Nonsignificant trend to increased adverse events (risk ratio 2.94, 95% CI 0.51 to 17.03) | Likely beneficial for pain; no benefit for other symptoms |
| Acetaminophen (paracetamol) ^{61–64} | 1000 mg 4 times daily in adults or 15 mg/kg in children | 2 RCTs (<i>n</i> = 90 children, 392 adults), plus 2 meta-analyses focused on fever | Moderate (few trials with limited randomization and allocation information) | Overall, acetaminophen was more effective than placebo in reducing fever and providing mild analgesia; it was less effective than ibuprofen in fever control (in children) | Adverse events higher with 1000 mg acetaminophen v. (25% v. 5%, <i>p</i> < 0.001); all events were mild or moderate (e.g., sweating) | Likely effective for fever and analgesia v. placebo; inferior to ibuprofen for fever control |
| Antibiotic ⁶⁵ | Various antibiotics | Meta-analysis (6 RCTs; <i>n</i> = 1047 adults and children) | Moderate (some trial quality concerns and inconsistent results) | No effect on reduction of persistent symptoms (risk ratio 0.95, 95% CI 0.59 to 1.51) | Adverse events increased (relative risk 1.8, 95% CI 1.01 to 3.21) | No benefit, and harms present |

Table 3: Alternative and nonpharmacologic interventions for the treatment of the common cold

| Intervention | Formulation and dose | Evidence | Risk of bias | Outcome | Harms | Comment |
|---------------------------------------|--|--|---|--|--|---|
| Honey ⁷¹⁻⁷³ | Yatma zam. 2.5-10 ml | 3 RKÇ | Orta | faydalı | yok | Öksürük faydalı |
| Zinc, oral ⁷⁴ | Different formulations, doses, frequency; zinc gluconate 23-mg lozenge every 2 h most common | metaanaliz | Orta | Semp. Şiddet süre az. | Ağızda kötü tat bulantı | Probable benefit in adults, but harms present; no benefit in children |
| Nasal irrigation ⁷⁵ | Generally, saline drops (children) or irrigation | Systematic review and meta-analysis (3 RCTs, <i>n</i> = 618) | High (multiple outcomes, most nonsignificant, and quality issues in RCTs) | Pooled analysis of 2 RCTs: no difference in nasal symptom score; other results inconsistent | 13% nasal irritation, 30% dry nose, 40% of infants intolerant of nasal drops | Unclear benefit |
| Humidified air ⁷⁶ | Heated water (42°C–47°C), vapourized | Systematic review and meta-analysis (6 RCTs, <i>n</i> = 394) | Moderate (unclear allocation concealment and mixed results) | Pooled analysis of 2 RCTs: fewer participants with persistent symptoms (Peto OR 0.31, 95% CI 0.16 to 0.60); very inconsistent results (<i>I</i> ² = 89%) | Increased harms, including mask discomfort and increased nasal congestion | Unclear benefit |
| Echinacea ⁵⁰ | Variable formulations and dosing; <i>E. purpurea</i> most common | Systematic review (14 RCTs, <i>n</i> = 2090) | Moderate (some trial quality issues, and inconsistent formulations, cold definitions and results) | Inconsistent results (not pooled); for example, 1 of 6 studies showed improved duration and severity of symptoms | No evidence of harms | Unclear benefit |
| Chinese medicinal herbs ⁷⁷ | Various formulations | Systematic review (17 RCTs, <i>n</i> = 3212) | High (poor trial quality) | Data not pooled; 1 of 17 RCTs showed improved severity of symptoms | Not reported | Unclear (likely no) benefit |
| Ginseng ⁷⁸ | North American ginseng extract in standard dose (26 mg/kg on day 1, 17 mg/kg on day 2, 9 mg/kg on day 3) v. low dose (half the amounts on each day) v. placebo | 1 RCT (<i>n</i> = 46 children aged 3–12 yr) | Low (high-quality trial) | No effects reported | No increase in adverse events | Unclear benefit |
| Vitamin C ⁴⁷ | 1.5–4 g for 1–5 d | Meta-analysis (7 trials, <i>n</i> = 3294 colds) | Moderate (reviewers used blinding as a surrogate of allocation concealment) | Pooled analysis of 7 RCTs: no effect on duration | No evidence of harms | No benefit |
| Zinc, intranasal ^{79,80} | Zinc nasal spray 33 mmol/L, each nostril 4 times daily (2.1 mg total) in 2 of 3 studies | Meta-analysis (3 studies, <i>n</i> = 453) | Moderate (high heterogeneity, possible nonblinding and poor description of randomization) | Pooled analysis of 3 RCTs: no significant effect on presence of symptoms at day 3 | Nasal burning and stinging; unresolved concern of permanent loss | Do not use (unclear benefit and possible serious harm) |

ORIGINAL PAPER

Christoph Grüber · Annette Riesberg · Ulrich Mansmann
Paul Knipschild · Ulrich Wahn · Malte Bühring

The effect of hydrotherapy on the incidence of common cold episodes in children: a randomised clinical trial

Ludwig *et al.* *Respiratory Research* 2013, **14**:124
<http://respiratory-research.com/content/14/1/124>



RESEARCH

Open Access

Efficacy of a Carrageenan nasal spray in patients with common cold: a randomized controlled trial

Martin Ludwig¹, Elisabeth Enzenhofer¹, Sven Schneider¹, Margit Rauch², Angelika Bodenteich³, Kurt Neumann⁴, Eva Prieschl-Grassauer³, Andreas Grassauer³, Thomas Lion^{2,5} and Christian A Mueller^{1*}

SOĞUK ALGINLIĞI ANTIVIRAL TEDAVİ

influenza için nöraminidaz inh.

- semptom süresini %26
- AOM insidansını %19'dan %9'a

rinovirus için pleconaril

Efficacy and Safety of Oral Pleconaril for Treatment of Colds Due to Picornaviruses in Adults: Results of 2 Double-Blind, Randomized, Placebo-Controlled Trials

Frederick G. Hayden,¹ Darrell T. Herrington,² Teresa L. Coats,³ Kenneth Kim,⁴ Ellen C. Cooper,⁵ Stephen A. Villano,⁵ Siyu Liu,⁵ Spencer Hudson,⁵ Daniel C. Pevear,⁵ Marc Collett,⁵ Mark McKinlay,⁵ and the Pleconaril Respiratory Infection Study Group*

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Safety and Efficacy Evaluation of Pleconaril for Treatment of the Common Cold

Fleischer Russell ✉, Katherine Laessig

Clinical Infectious Diseases, Volume 37, Issue 12, 15 December 2003, Pages 1722,

<https://doi.org/10.1086/379830>

Published: 15 December 2003

AKUT STREPTOKKAL FARANGİT TANI

Klin,vir. Üsye şüph.
Burun akıntı
Öksürük
Konjiktivit
Ses kısıklığı
Oral ülcer
Viral ekzantem

Klin.GAS ile uyumlu
Ateş>38 C
Ani başlangıçlı boğ.ağrısı
Tonsillofarangial/uvular ödem
Tonsillofaringeal exuda
Ağrılı serv.LAP.
Kızıl döküntüsü
GAS maruziyet öyküsü

evet

RAT

Pozitif

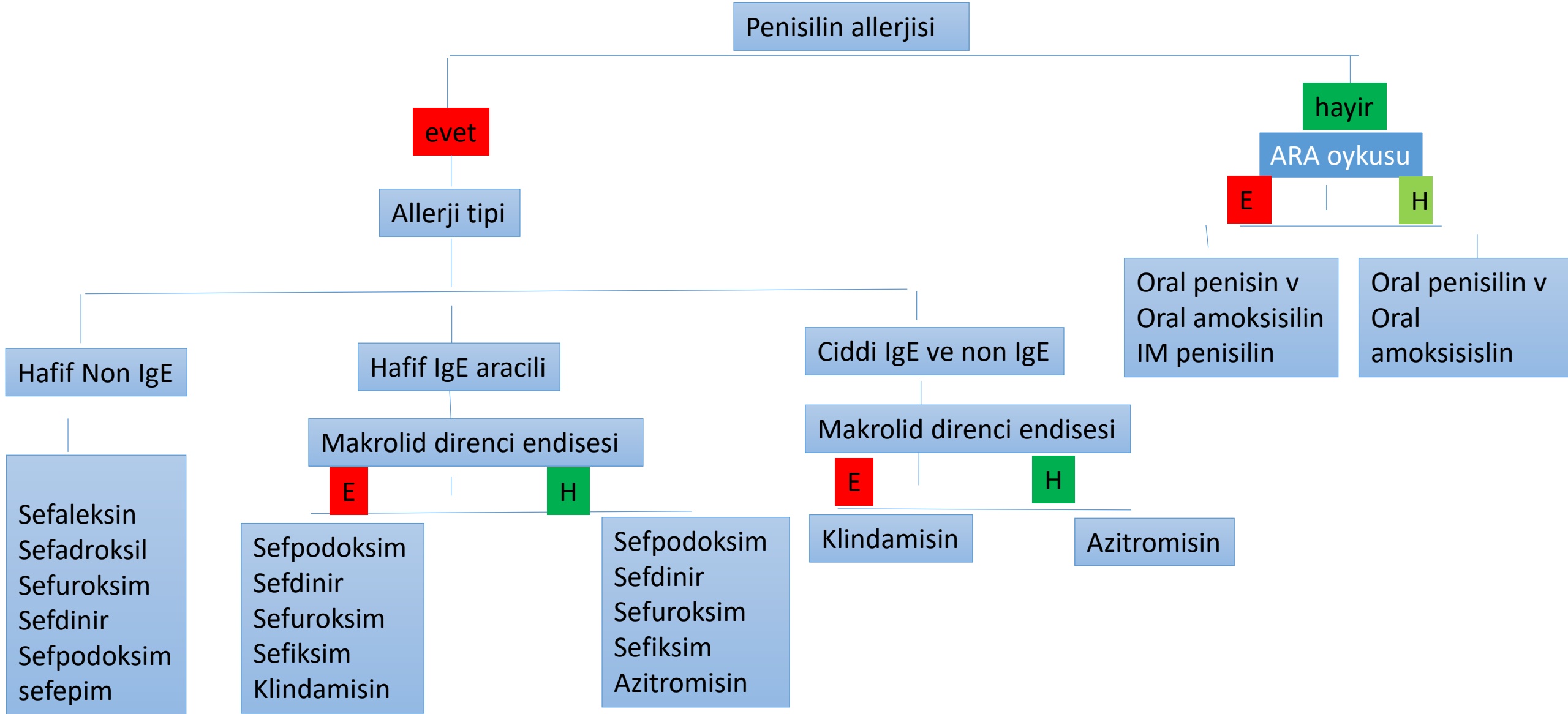
Negatif

GAS prev. Yüksek(kreş)
ARA öyküsü
İmmun Yet
ARA'lı yada İY olgu ile yakın temas

Boğaz kültürü

Kesin değil
Ateş >38 C
Tons. Eks.
Ağrılı Serv. LAP
Öksürük yok
>2 fazla

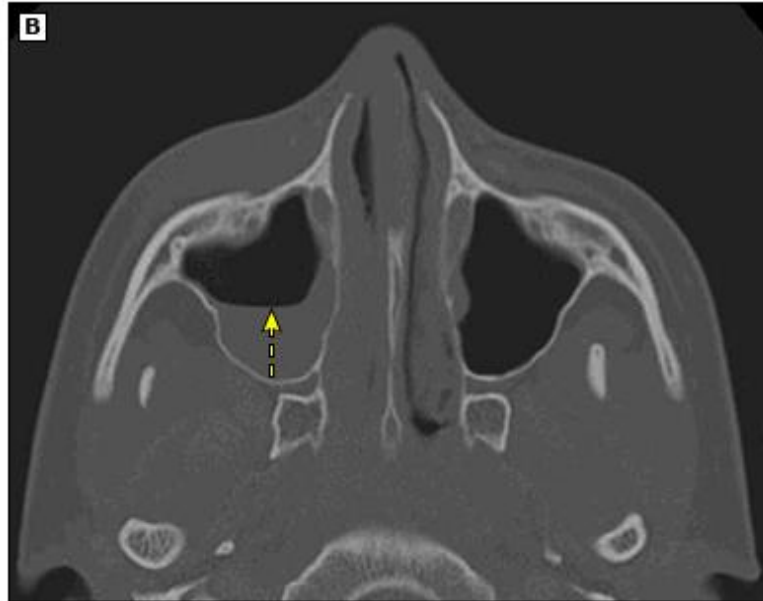
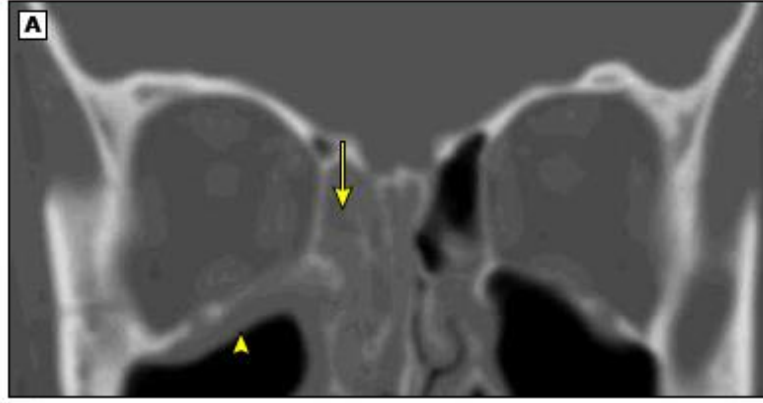
STREPTOKOKAL TONSİLLOFARANJİT TEDAVİSİ



AKUT BAKTERİYEL RINOSİNÜZİT TANIMI

| linik sunum | tanım |
|-------------------|---|
| persistan semptom | >10 günden nazal yakınma, öksürük |
| şiddetli semptom | >3 günden, 39 C ateş ve pürülan nazal akıntı |
| kötüleşen semptom | başlangıçta düzelen solunum semptomları kötüleşir yada ateş / baş ağrısı ilave olursa |

RINOSINUZITIN BT BULGULARI

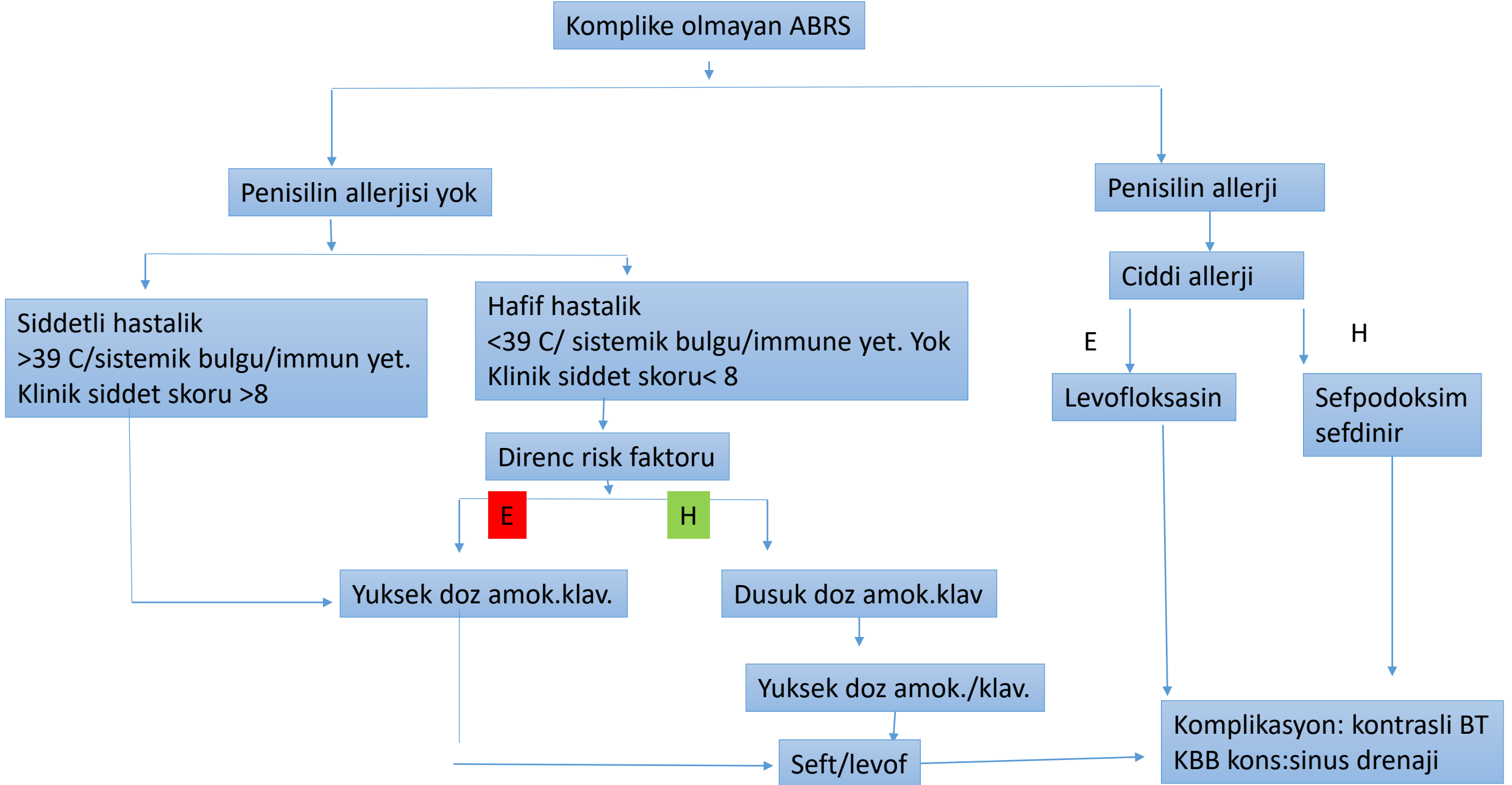


Koranal BT: sag etmoid sinus
opasifikasyonu, maksillar sinus
tepesinde mukozal kalinlasma
Aksial BT: hava sivi seviyesi

ABRS DE KLINIK SİDDET SKORU

| Semptom ve bulgu | puan |
|---|------|
| Nazal veya postnazal akıntı | |
| minimal | 1 |
| ciddi | 2 |
| Nazal konjesyon | 1 |
| Oksuruk | 2 |
| Nefes kokusu | 1 |
| Yüz Duyarlılığı | 3 |
| Eritamatoz nazal mukozası | 1 |
| Ateş | |
| <38 C | 1 |
| >38 C | 2 |
| Basıncı (retroorbital)/huzursuzluk | |
| Siddetli | 3 |
| Hafif | 1 |

AKUT BAKTERİYEL RINOSİNÜZİT TEDAVİ ALGORİTİM



ABRS TEDAVI

Hospitalizasyon gereken ABRS

Ampisilin- sulbaktam
Sefotaksim
Seftriakson
Levofloksasin

Vankomisin
+
metronidazol

Adjuvan tedaviler:

Intranazal steroid

Salinle yikama

Nazal dekonjestan

Mukolitik

Antihistaminik

AKUT OTITIS MEDIA

Normal timpanik membran

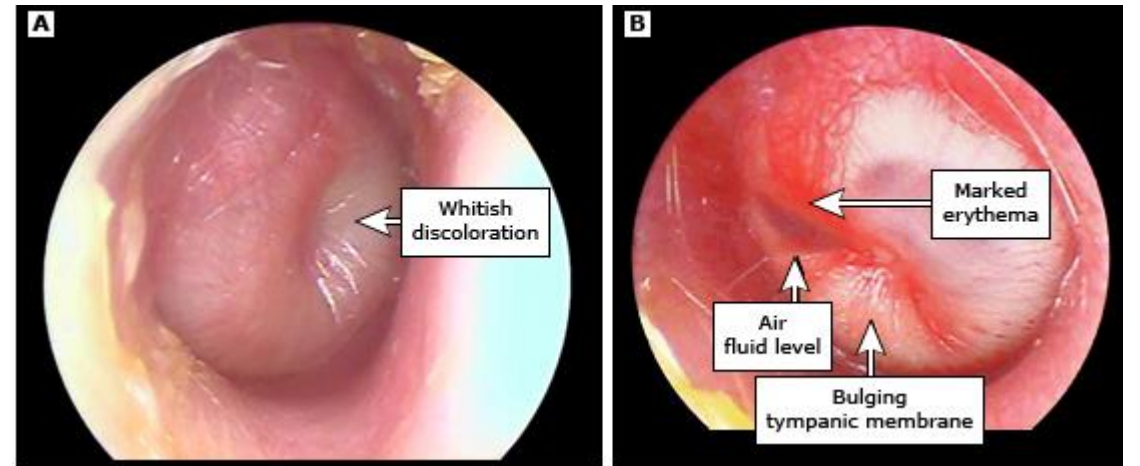


AOM progresyonu

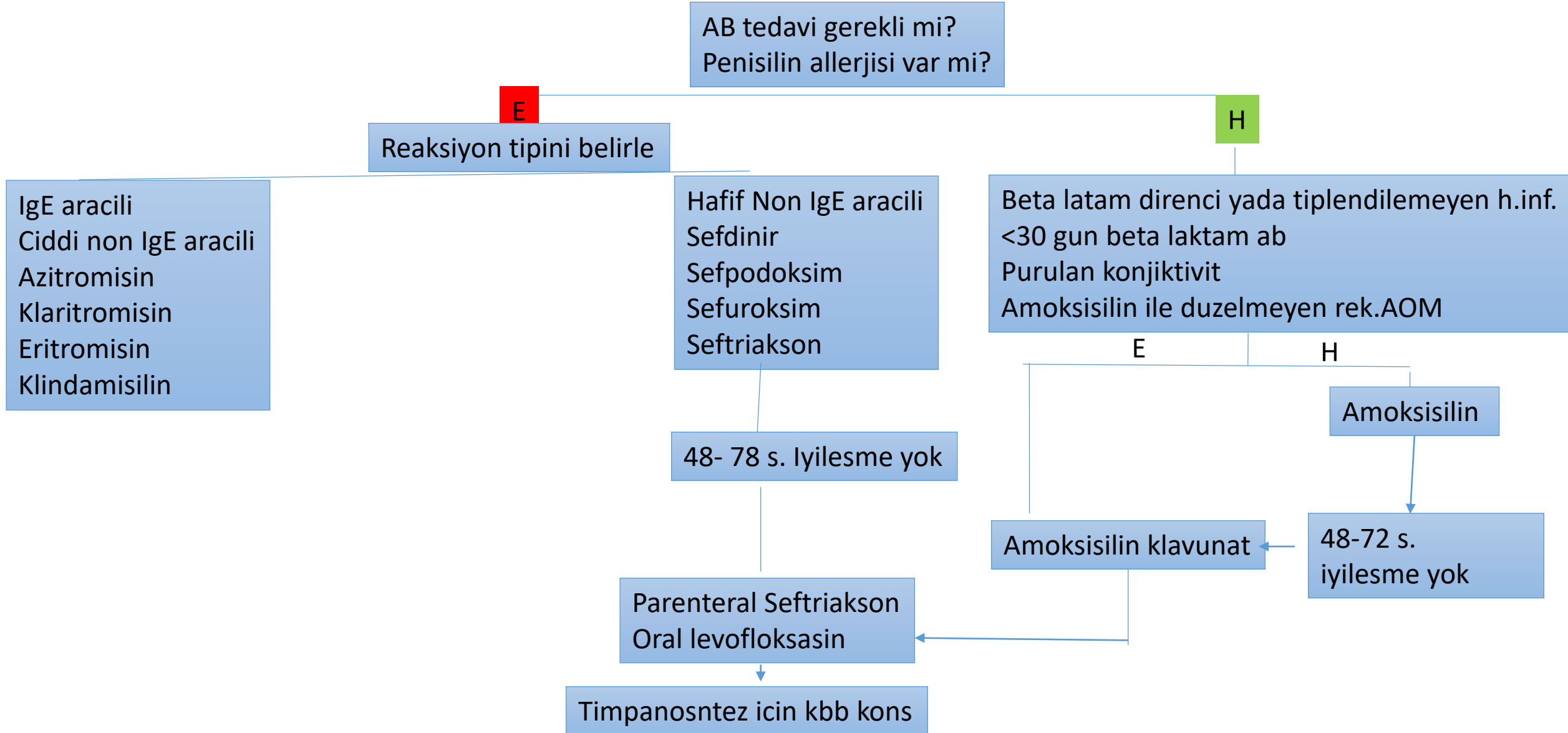


- A) AOM erken donem: enflamasyon
B) Hava-sivi seviyesi ile purulan effuzyon
C) Orta kulakta purulan effuzyonlu TM kabarıklığı

AOM tanim



AOM TEDAVI ALGORITMASI



KRUP



Paediatrics & Child Health, 2017, 166–169

doi: 10.1093/pch/pxx019

Practice Point

OXFORD

Practice Point

Acute management of croup in the emergency department

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e-mail: info@cps.ca website: www.cps.ca.

Abstract

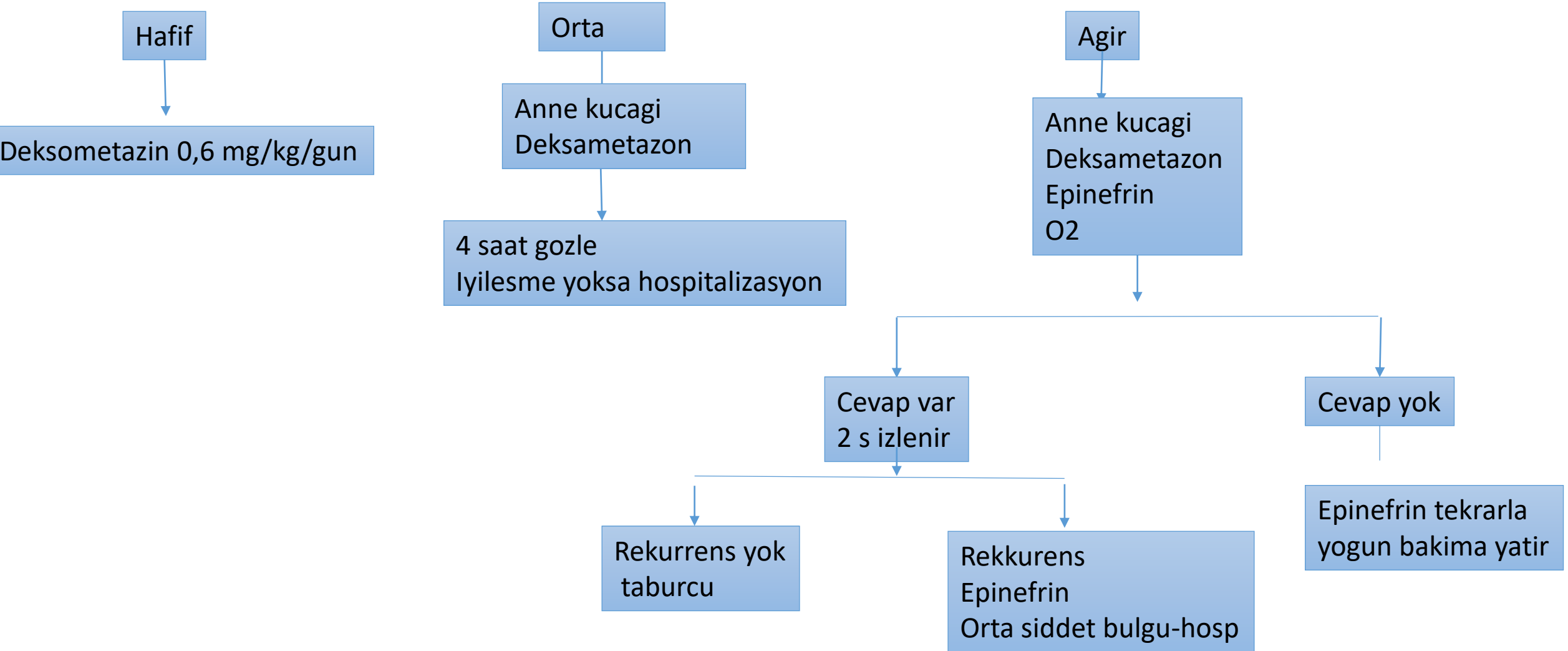
Croup is one of the most common causes of upper airway obstruction in young children. It is characterized by sudden onset of barking cough, hoarse voice, inspiratory stridor and respiratory distress caused by upper airway inflammation secondary to a viral infection. Published guidelines for the diagnosis and treatment of croup advise using steroids as the mainstay treatment for all children who present to emergency department (ED) with croup symptoms. Dexamethasone, given orally as a single dose at 0.6 mg/kg, is highly efficacious in treating croup symptoms. Despite the evidence supporting the use of steroids as the cornerstone of croup treatment, there is significant practice variation among physicians treating croup in the ED. This practice point discusses evidence-based management of typical croup in the ED.

Keywords: *Corticosteroids; Croup; Dexamethasone; Epinephrine; Heliox*

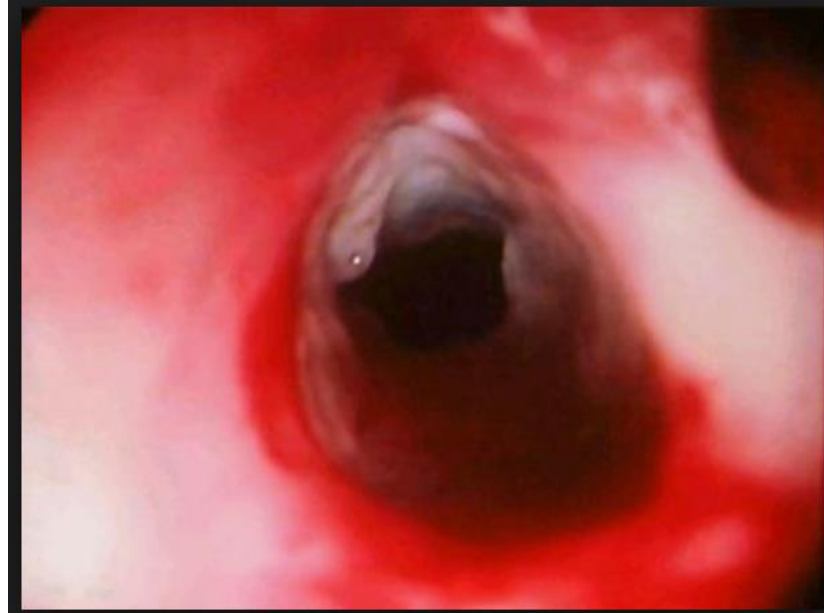
KRUP SKORLAMASI

| ozellik | hafif | orta | ciddi | Solunum yetmezligi |
|------------------|---------|-------------|----------------|--------------------|
| Kaba oksuruk | nadiren | siklikla | siklikla | yorgun |
| Stridor | yok | istirahatte | Ins. ve exp. | Zor duyulur |
| Retraksiyon | yok | istirahatte | Ciddi/belirgin | Belirgin degil |
| Letarji/agitasyo | yok | yok | hafif | belirgin |
| siyanoz | yok | yok | yok | var |

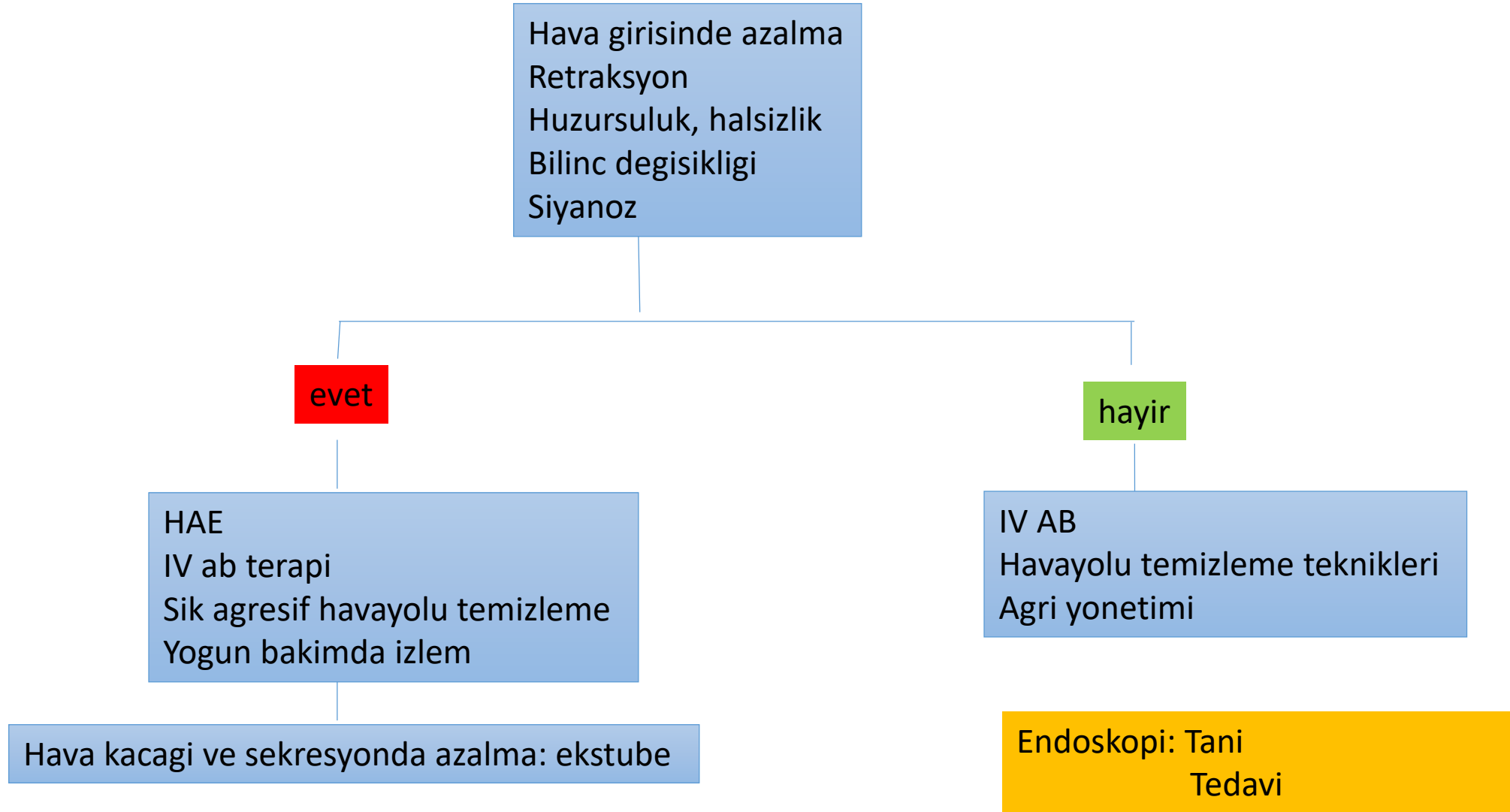
KRUP TEDAVISI



BAKTERİYEL TRAKEİT



BAKTERİYEL TRAKEİT TEDAVİ ALGORİTMASI



BAKTERİYEL TRAKEİT TEDAVİ REJİMLERİ

Penisilin ya da sefalosporin allerjisi yoksa

| rejim | Pediyatrik doz |
|-------------------------|--------------------------|
| Vankomisin veya | 40-60 g/kg/gun 3-4 doz |
| Klindamisin | 40 mg/kg/gun 3 doz |
| arti | |
| Seftriakson veya | 50-100 mg/kg/gun 1-2 doz |
| Sefotaksim veya | 150-200mg/kg/gun 4 doz |
| Ampisilin- sulbaktam | 150-200 mg/kg/gun 4 doz |

Ciddi beta lactam allerjisi varsa

| | |
|---------------------------|--|
| Vankomisin veya | 40-60 mg/kg/gun 3-4 doz |
| Klindamisin | 40 mg/kg/gun 3 doz |
| arti | |
| Levofloksasin veya | 6 ay- 5 yas 20mg/kg/gun 2 doz >5 yas 10 mg/kg/gun 1 doz |
| Siprofloksasilin | 20-30 mg/kg/gun 2 doz |

AKUT EPIGLOTTIT

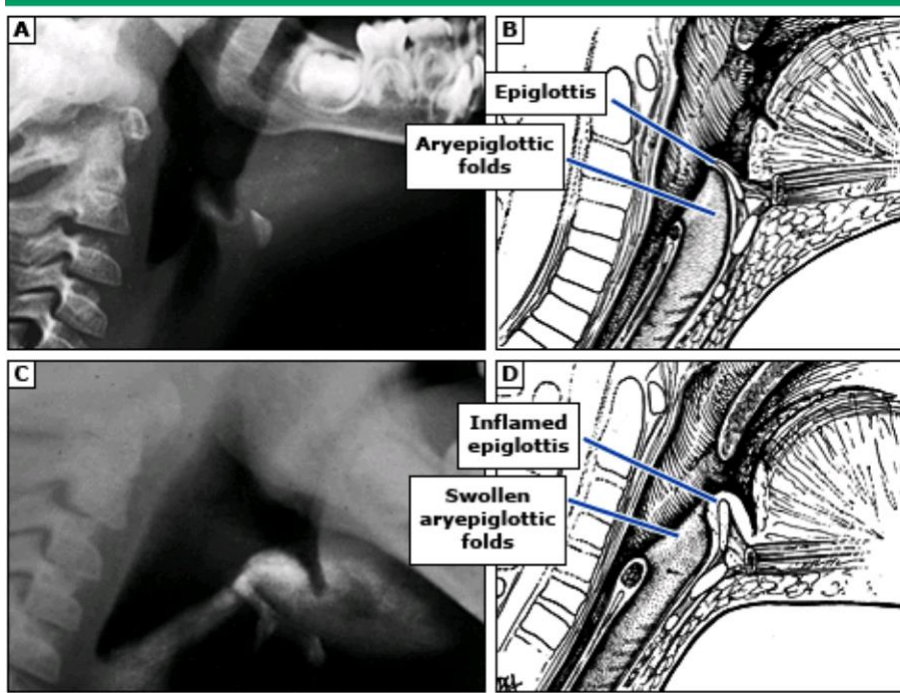
Tripot postur



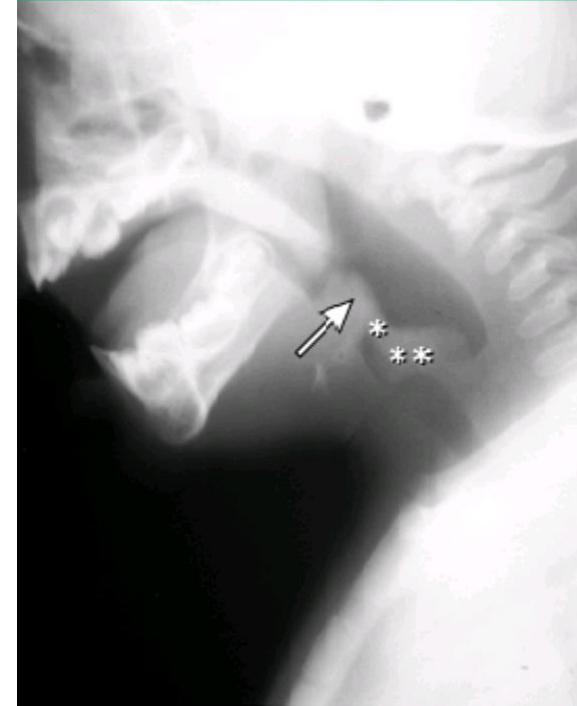
Govde one dogru, boyun hiperektansiyonda, cene one dogru: ust havayolu acikligini arttirma cabasi

AKUT EPIGLOTTITIS RADYOLOJİ

Lateral Boyun Grafisi

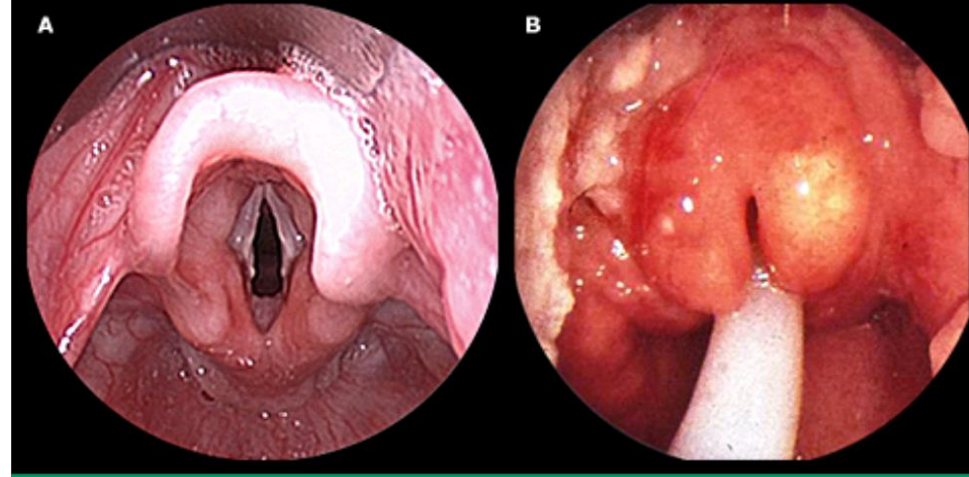
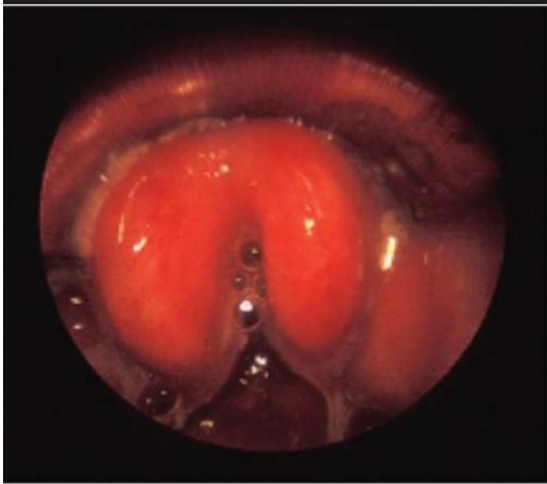


- A) Normal epiglottis
- B) Epiglottitis



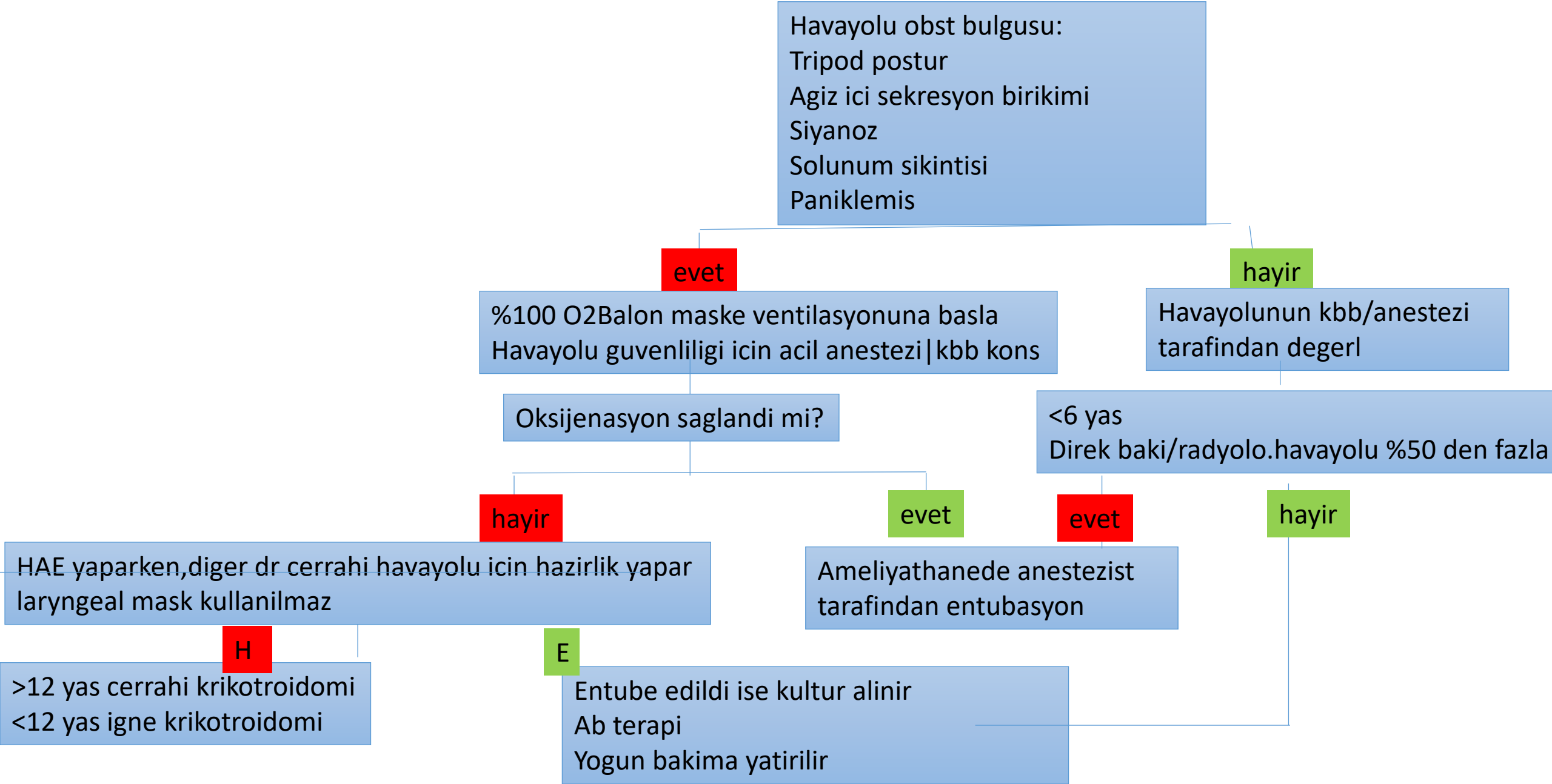
Sismis epiglottis
ariepiglottik katlantılar

AKUT EPIGLOTTITIS DIREK BAKI



- A) Normal epiglottis
- B) Eritemli ve odemli epiglottitis

EPIGLOTITLİ OLGUDA HAVA YOLU YONETIMI

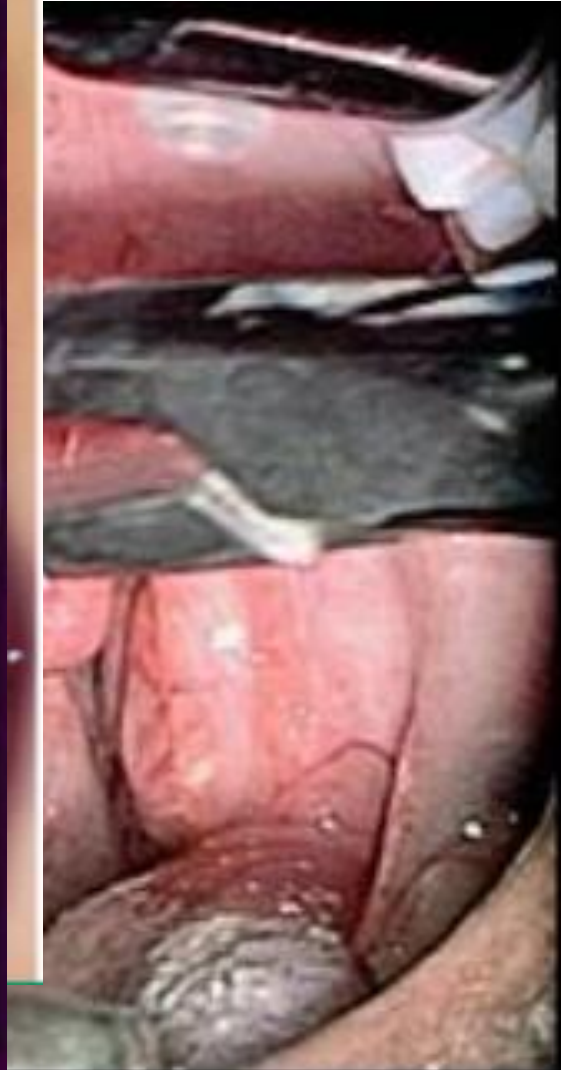


AKUT EPIGLOTTIT TEDAVISI

| REJİM | PEDIATRİK DOZ |
|-------------------------|-------------------------|
| Seftriakson veya | 5-100 mg/kg/gun 1-2 doz |
| Sefotaksim | 150-200mg/kg/gun 4 doz |
| arti | |
| Vankomisin veya | 40-60 mg/kg/gun 3-4 doz |
| Klindamisin | 30-40 mg/kg/gun 3 doz |

Vankomisin sepsis/menengit eslik ediyorsa yada bolgesel staf. klindamisin yada metsilin direnci varsa.

PERITONSILLER ABSE TEDAVI ALGORITMASI



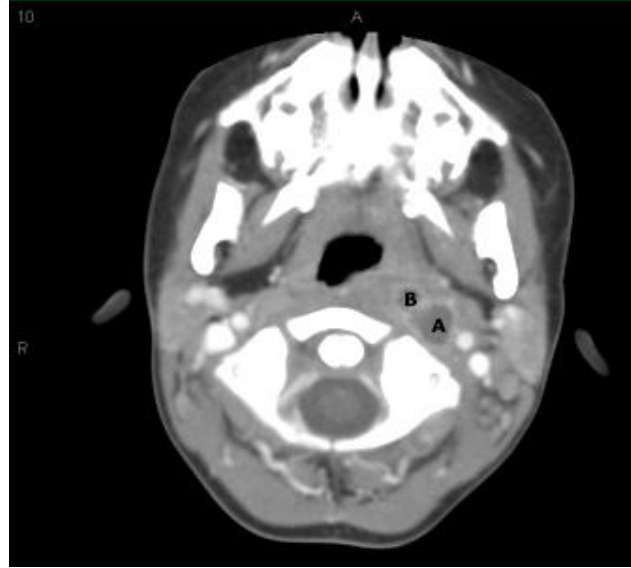
RETROFARINGEAL ABSE TEDAVI ALGORTMASI



Posterior farangial kabarıklık
laringoskopik görüntü



Lateral boyun grafisinde
retrofaringeal boşluğun arttığı
lordozun düzleştiği



Kontrasli boyun BT: düşük dansiteli merkez
kontrast tutulumlu çerçeve ile çevrelenmiştir

Retrofaringea abseden şüphesi
Ateş , Disfaji, Ağız içi sek. artışı, Trismus, Ense sertliği

Ciddi hava yolu obstr., bulgusu
Tripod/koklama pozisyonu
Suprasternal/subklavikular çökme
Siyanoz
Oksürememe veya konuşamama

H

Kontrasli Boyun BT

Abse >2.5 cm
Cerrahi drenaj
IV AB

Flegmon, abse <2.5 cm
IV AB , 24-48 s

Düzelme yok
Cerrahi drenaj
IV AB

PERİTONSİLLER VE RETROFARINGEAL ABSE TEDAVİ

| Parenteral Rejim | Pediyatrik doz |
|-----------------------------------|----------------------|
| Ampisilin – sulbaktam veya | 150 mg/kg/ gün 3 doz |
| Klindamisin | 40 mg/kg/gün 3 doz |
| artı | |
| Vankomisin | 40-60 mg/kg/ gün |

| Oral rejim | Pediyatrik doz |
|-----------------------------------|--|
| Amoksisilin/ klavunat veya | 90mg/kg/gün 2 doz |
| Klindamisin | 30 mg/kg/gün 2 doz |
| artı | |
| Linezolid | <12 yaş 30Mg/kg/gün 3 doz, >12 yaş; 20 mg/kg/gün 2 doz |