Pearls

Top Consults to the Pediatric ED

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Disclosure

I have no conflict of interest to declare.

(I have no affiliation, honoraria or monetary support from an industry source.)
Objectives

As a result of attending this session, participants will be able to:

• Understand ideal ways to prepare your patient for ER
• Describe management of the wheezy infant
• List pediatric fractures that do not require ER/Orthopedics
• Describe management of children with minor head injuries
Your Challenge
Outline

- Preparing for ER
- Wheezing infant 0-2 y.o.
- Fractures
- Minor head injuries
- Q & A

http://m.dailyhunt.in
Referrals to ER

- pressroomvip.com
- tylenol.ca
- advil.ca
- pharmacyowners.com
- starvalleyindependent.com
- healthhub.sg

[Image of crying babies and medication packaging]
The Wheezing Infant - < 1 year old

- Cough, congestion
- Good po
- FHx asthma
- 38.7°C, RR 48
- Audible wheeze
- Mild retractions
Bronchiolitis

- Reasons to refer
  - Poor oral fluids
  - Respiratory distress
  - O2 saturation <90%
  - NOT cough, wheeze, mild retractions

- Outpatient management
  - Suction for hydration, sleep, comfort
  - Education of caregivers
  - NOT CXR, salbutamol, steroids

http://www.thechildren.com/health-info/conditions-and-illnesses/bronchiolitis
Bronchiolitis

Caution:

• < 3 mo
• Chronic respiratory or cardiac illness
• History of prematurity
The Wheezing 1-2 year old

- Cough, congestion
- Good po
- FHx asthma
- 38.7°C, RR 44
- Audible wheeze
- Mild retractions
Asthma in Preschooler

POSITION STATEMENT

Diagnosis and management of asthma in preschoolers: A Canadian Thoracic Society and Canadian Paediatric Society position paper

Francine M Ducharme, Sharon D Dell, Dhenuka Radhakrishnan, Roland M Grad, Wade TA Watson, Connie L Yang, Mitchell Zelman
CPS/Canadian Thoracic Society

Posted: Oct 5 2015
The Wheezing 1-2 year old

- Still most likely bronchiolitis
  - Unless ++ atopy
- “Asthma”
- Early diagnosis and management
Fractures – When?
Fracture - Clavicle

• Pre-pubertal, non-tenting
  • Sling/Stevenson for comfort
  • No contact sports x 2 mo
  • Follow-up 4–6 weeks

• Post-pubertal, undisplaced
  • Sling/Stevenson for comfort
  • F/u Ortho

“Candidate for internal fixation?”
Fracture - Clavicle

- Post-pubertal, displaced/comminuted → ER
- Any age, tenting → ER
Fractures - Wrist

- Ulna/Radius – buckle, SH-1
- Removable splint - option
- 4 weeks
- Follow-up pm
Fracture - Ankle

- Distal fibula – undisplaced
  - SH-1, SH-2, avulsion
- Can manage as ankle sprain

Fracture - Foot

• Phalanx – D2-D5
  • No clinical deformity
  • Hard shoe +/- buddy tape

• Metatarsal – D2-D5
  • Undisplaced
  • Hard shoe or cast
  • Exceptions – Jones or stress #
Minor Head Injuries < 2 yo

- 6 month old
- No LOC
- No vomiting
- Frontal hematoma

- Imaging?
- Refer to ER?
## Minor Head Injuries – Skull X-rays

<table>
<thead>
<tr>
<th>Risk Points</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>≥ 12 mo</td>
</tr>
<tr>
<td>1</td>
<td>6-11 mo</td>
</tr>
<tr>
<td>2</td>
<td>3-5 mo</td>
</tr>
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# Minor Head Injuries – Skull X-rays

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<tr>
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<td>None</td>
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<tr>
<td>1</td>
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<td>Small (barely palpable)</td>
</tr>
<tr>
<td>2</td>
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<td>Medium (easily palpable)</td>
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<tbody>
<tr>
<td>0</td>
<td>≥ 12 mo</td>
<td>None</td>
<td>Frontal</td>
</tr>
<tr>
<td>1</td>
<td>6-11 mo</td>
<td>Small (barely palpable)</td>
<td>Occipital</td>
</tr>
<tr>
<td>2</td>
<td>3-5 mo</td>
<td>Medium (easily palpable)</td>
<td>Temporal/ Parietal</td>
</tr>
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Minor Head Injuries – CT < 2 yo

- GCS=14 or other sx of altered mental status or
- Palpable skull fracture

No

- Occipital/parietal/temporal scalp hematoma, or
- LOC ≥ 5 s, or
- Severe mechanism of injury, or
- Not acting normally per parent

< 0.02% risk of TBI
CT not recommended

Yes

4.4% risk of TBI
CT recommended

Yes

0.9% risk of TBI
Observation vs CT

Minor Head Injuries $\geq 2$ yo

- 10 year old
- LOC x few seconds
- “Tired” x initial 15 minutes
- Headache
- Dizziness
- Slight imbalance
Minor Head Injuries

• Diagnosis?
• Management?
Minor Head Injuries – CT ≥ 2 yo

- GCS=14 or other sx of altered mental status or
- Signs of basilar skull fracture

No

- History of LOC, or
- History of vomiting, or
- Severe mechanism of injury, or
- Severe headache

No

<0.05% risk of TBI

CT not recommended

Yes

CT recommended

4.3% risk of TBI

Yes

Observation vs CT

0.9% risk of TBI

Concussion

- 3 S’s
  - Sports
  - School
  - Screens
- Pain relief
- Concussion clinic

http://www.thechildren.com/sites/default/files/PDFs/Trauma/Current_Brocheurs/01a_mtbi-booklet_1.pdf
Take-Home Points

• Prepare your patients for ER
• Bronchiolitis ≠ Asthma
• Some fractures do not require ER visit/Orthopedics
• Head Injuries
  • Schutzman Clinical Score
  • PECARN CT rule
  • Brain rest