

Child-Like Behaviors: 10 Myths of EMS Pediatric Care

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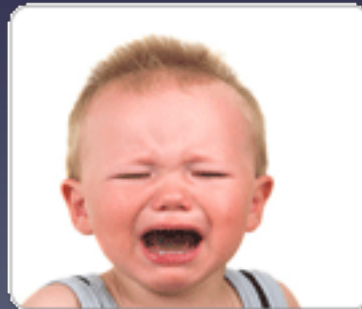
Denver Health

Brian Schimpf



Myth #1

- Pain management is bad



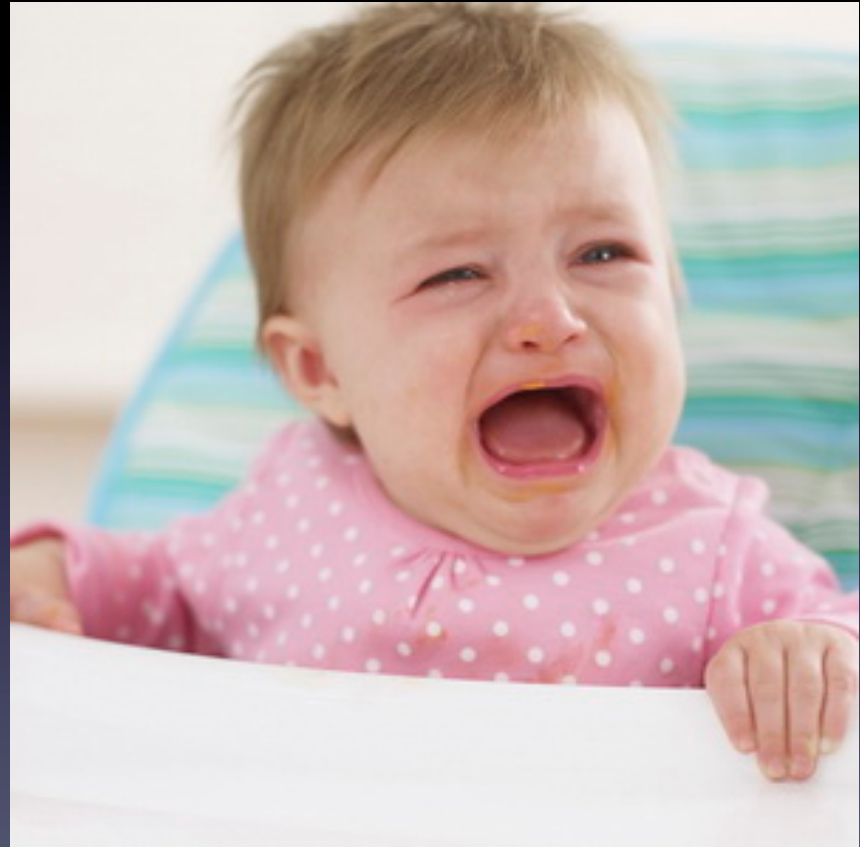
Treating Pain

- “Care more for the individual patient than for the special features of the disease”
 - William Osler, 1899



Pain Myths

- “It can wait”
 - No!
 - Waiting until the patient gets to the ED can result in a 2 hour delay in treatment
 - And that is IF the ED has its act together
 - » Abbuhl et al, Prehosp Emerg Care 2003
 - Higher overall doses when started in the field
 - Vassiliadis et al, Emerg Med 2002



Pain Myths

- It isn't safe
 - Side effects (hypotension, respiratory depression)
 - It is!
 - Barber et al, *Pediatr Emerg Care* 2004
 - Kanowitz et al, *Prehosp Emerg Care* 2006
 - Krauss et al, *Acad Emerg Med* 2007

Pain Management

- Abdominal pain?
 - Yes!
 - Thomas et al, J Am Coll Surg 2003
 - Gallagher et al, Ann Emerg Med 2006
- Trauma patients?
 - Yes!
 - Soriya et al, J Trauma 2012







Options

- Intranasal
 - Fentanyl
 - 2-4 mcg/kg
 - Max is 1 cc/nostril
 - » Concentration is 50 mcg/cc
 - Midazolam
 - 0.2 – 0.4 mg/kg
 - Concentration is 5mg/cc
- Rule of thumb, double the dose for IN



Myth #2

- Children don't get c-spine injuries



Pediatric Cervical Spine Injuries (CSI)

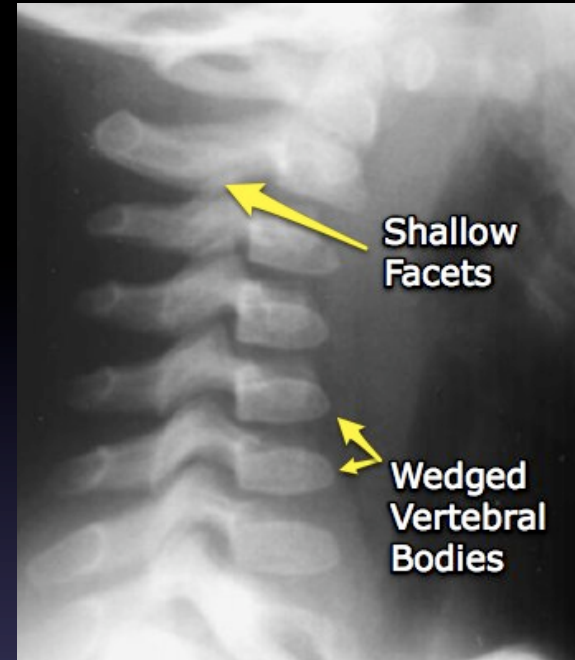
- Upper spine greater risk in < 8 years
 - Anatomic fulcrum between C₁ and C₃



Adult C-S



Pediatric C-S



Unique Features of the Pediatric C-Spine

Wedged Vertebrae

Incomplete Ossification

Horizontal Facet Joints

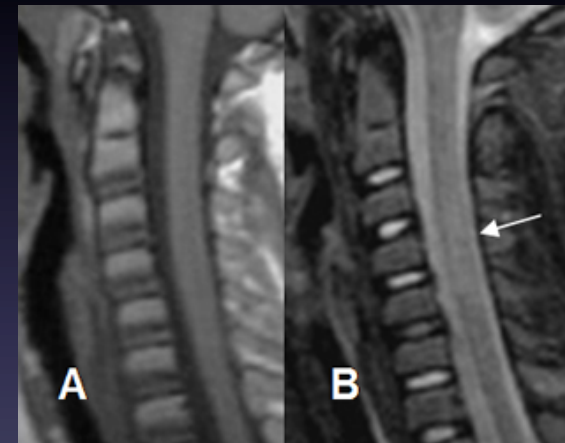
Immature Ligaments

↑ Predental Space-5 mm

↑ Prevertebral Soft Tissues

SCIWORA

- Spinal Cord Injury Without Radiographic Abnormalities
 - Pang et al, 1983
- More common in the pediatric population
- Injury from rapid deceleration mechanism
- From inherent laxity of pediatric c-spine
- Clinical diagnosis
 - Brief sensory or motor deficits
 - Electric shocks
 - Rapidly clearing weakness
 - *Delayed deficits-up to 4 days*



Myth #3

- Immobilization works
 - It doesn't!



Spinal Immobilization



Spine Boards

- No benefit
 - Perry et al, Spine 1999
 - Hughes, J Trauma 1998
- May hurt
 - Goldberg et al, Ann Emerg Med 2001
 - Haut et al, J Trauma 2010



C-Collar

- Never based on data!
- May be harmful
 - Ben-Galim et al, J Trauma 2010
 - Engsberg et al, J Emerg Med 2013
- “Routine use” can be safely avoided
 - Sundstrom et al, J Neurotrauma 2013







Myth #4

- Mechanism alone warrants trauma activation/lights and sirens
 - No published evidence has ever shown mechanism alone as a good predictor



Myth #5

- Abuse is important to talk about, but other things are more common
 - Fact – number of deaths due to abuse in < 5 population is greater than MVAs and fires combined
 - Many do NOT have obvious findings on exam
 - If you are not cruising, you shouldn't be bruising!



The Biggest Myth about Child Abuse

The biggest myth is that the dangers to children come from strangers. In most cases, the perpetrator is someone the parent or child knows, and is often trusted by the child and family.

Myth # 6

- ALTEs aren't serious if they look good
 - Apparent life threatening event
 - Frightening to the observer
 - Apnea
 - Color change
 - Change in muscle tone
 - Choking
 - Gagging



ALTE

- By definition, they look good
 - High risk
 - Symptoms at the time of evaluation
 - Bruising
 - History of ALTE (especially in the past 24 hours)
 - History of ALTE or SIDS in sibling
 - Age < 6 months
 - Especially less than 3 months



Myth # 7

- As long as my asthmatic or allergic reaction patient is looking ok, I am safe
 - Can go down hill fast



Myth # 8

- Epinephrine should be feared

– It should not!

- Asthma
- Anaphylaxis
 - Remember the IM is better than SQ!



Myth # 9

- Kids don't have blood pressures
 - They do!



Myth # 10

- Children are not little adults
 - They are!



**CHILDREN ARE
LITTLE ADULTS?**



HIGHLY ILLOGICAL.

quickmeme.com

Adults Are Just Big Kids







Kids ARE Small Adults

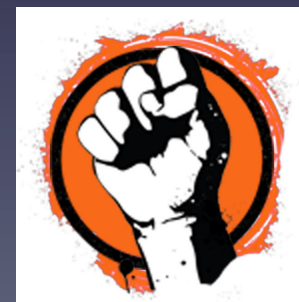
- History and physical exam are key
- ABCs
- Develop a relationship with your patient
 - It will be worth your time



Don't Ever Underestimate the Power of Youth!



POWER OF YOUTH





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