

Guns, Gels, Drills, & Kings

Pediatric IO Access & Alternate Airway Management

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- Intraosseous (IO) access

- Why?
- Why not?
- How long between "sticking the same bone"?
- Where?
 - Proximal tibia
 - Distal tibia
 - Distal femur
 - Humerus
 - Sternum (only adults)
- Age?
- Which meds?
- Complications?
- How long can you leave an IO in?
- Types of IO toys
 - Jamshidi & Cook - "twist & pop"
 - Bone injection gun (BIG) - "bone gun" and NIO "new IO"
 - SAM IO – "SAM IO"
 - BD IO – "rechargeable with safety needles IO"
 - EZ-IO - "bone drill"
 - FAST (civilian/military) & TALON (only military) "sternal IOs"

- Alternate airway management

- Bagging vs. backup/alternate airways
 - Bagging vs. intubation & kids
 - King airways
 - What size for what size kid?
 - How much air to inflate with?
 - Gastric access
 - Laryngeal mask airways (LMA's)
 - What size for what size kid?
 - How much air to inflate with?
 - Gastric access
 - i-gels
 - What size for what size kid?
 - Gastric access
 - Verification of placement with EtCO2?
 - Attach to a ventilator?
 - How long can you leave them in?
- ABCDE of pediatric cardiac arrest (Handtevy style)

References for Products Discussed

Intraosseous access (Jamshidi, Cook, NIO/Bone Injection Gun, BD IO, & EZ-IO)

www.cookmedical.com
www.boundtree.com
www.ps-med.com
www.bd.com
www.sammedical.com
www.teleflex.com

Non-visualized airways (King airways, laryngeal mask airways, & i-gels)

www.ambuusa.com
www.teleflex.com
www.intersurgical.com

“My kingdom for an intravenous line...”

J. Orłowski MD


“Given the precedent of the American Society of Anesthesiologists,
failure to confirm airway placement with EtCO₂ monitoring invites litigation”

J. Falk MD

Restart The Heart
Before You Depart

A	RRIVE
B	VM King, LMA, i-gel
C	OMPRESS
D	RILL or other IO
E	PINEPHRINE

On Scene
5 STEPS
2 Minutes



KING/LARYNGEAL TUBE AIRWAYS

	King	Weight/ Length	Ways to Remember
Peds	0	< 5 kg	0 for a 0-year-old
	1	5–12 kg	1 for a 1-year-old
	2	12–25 kg	2 for a 2-year-old
	2.5	25–35 kg	2.5 for 25 kg
Big People	3	4–5 feet	Bigger than Broselow 3
	4	5–6 feet	4 for just about all adults
	5	> 6 feet	5 if bigger than a backboard

LARYNGEAL MASK AIRWAYS

& i-gel's

	AuraGain	Weight	Ways to Remember
Peds	1	< 5 kg	1 for 1 hour old
	1.5	5–10 kg	1½ for up to 1½ years old
	2	10–20 kg	2 years old to 20 kg
	2.5	20–30 kg	2.5 for 25 kg
Big People	3	30–50 kg	Bigger than Broselow 3
	4	50–70 kg	4 (for) just about all adults
	5	70–100 kg	5 if bigger than a backboard