# Tricks of the Trade in Emergency Medicine

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## Cases

- Wound care
- Tissue adhesives
- Pediatric pearls
- Can’t afford my meds
- Orthopedics
- Endotracheal intubation
- Ocular injury
- Peritonsillar abscess
- Vascular access
- Back pain
- Odors in the ED

## Case 1: Scalp Laceration

6 y/o frightened boy presents with a scalp laceration after falling against a table corner edge.

How do you measure the length of the wound?

**Trick:** Use your “handy ruler” or stethoscope.

How do you minimize missing a 2nd laceration?

**Trick:** Good lighting is the key!  
1. LED flashlight  
2. Manual palpation of the scalp

How would you close the scalp laceration?

**Trick #1:** Pediatric scalp laceration: 2 staple guns  
**Trick #2:** Hair Apposition Technique: Modified HAT trick

## Case 2: Tissue Adhesives

How could you safely close the wound with a tissue adhesive?

**Trick:** Tegaderm with cut-out hole in center

What are other uses for tissue adhesives?

1. In combination with steristrip tapes, closure of wounds under slight tension.  
2. In combination with absorbable sutures, closure of wounds under slight tension  

What if the skin is really thin and fragile?

**Trick:** Use steristrips to “strengthen” wound edges in combination with sutures.

## Case 3: Pediatric Pearls

A 5 y/o boy presents with a Salter-Harris I distal radius fracture after falling from the monkey bars.

What do you do for pain control?

**Trick:** Intranasal fentanyl 1.5 mcg/kg IN. May repeat 0.5-1.5 mcg/kg in 5 minutes

The patient’s mother mentions that his asthma has been acting up for the past 2 days.  
You maybe hear wheezing. The patient is only partly cooperative with your exam.  
How can you get a better exam?

**Trick:** Candleflame app

## Case 4: I can’t afford my medications.

A homeless 35 y/o woman presents with a pyelonephritis, but can’t afford the ciprofloxacin prescription.

**Trick:** Generic Medication List www.genericmedlist.com
Case 5: Hand & Wrist Injury

30 y/o pedestrian vs auto presents with multiple abrasions and...

1. Gravel embedded in left palm
2. Right pinky finger laceration
3. Right 2nd metacarpal fracture
4. Left distal radius fracture

How would you anesthetize the left palm for copious irrigation and gravel removal?

**Trick:** Forearm Ultrasound-guided Nerve (FUN) block

* U/S-guided nerve block of radial, ulnar, and median N
* Inject at level of the mid-forearm
* Nerves = hyperechoic

How would you stop the constant oozing of the right pinky finger for suturing?

**Trick:** Hemostasis in finger lacerations: Make a glove “ring”.

How would you bandage the finger laceration?

**Trick:** “The Digi-Spec” • Wrap tubular gauze around finger using a pelvic speculum

* Be careful not to wrap too tightly because of digital necrosis.

How would you splint the 2nd metacarpal fracture?

**Trick:** Radial gutter splint

How would you splint the distal radius fracture?

**Trick:** Reverse sugar tong splint

Case 6: Endotracheal Intubation

45 y/o morbidly obese, edentulous woman arrives by ambulance for severe asthma requiring intubation.

Maximize oxygenation in your bag valve mask technique for someone with no teeth.

**Trick:** Lower lip mask repositioning technique

How can you maximize your chances for a successful intubation?

**Trick:** Hold laryngoscope handle as close to blade as possible to maximize lifting force
**Trick:** Use the bimanual laryngoscopy maneuver to optimize view of vocal cords

Case 7: Ocular Injury

50 y/o man s/p altercation presents with eye pain from pepper spray by the police. The patient is extremely sensitive to application of anesthetic eyedrops. How can you apply them more gently?

**Trick:** “Blink it in”

* Apply drops into medial canthus.
* Have patient then “blink” the drops in.

Now that he can open his eyes, let’s check his visual acuity.

**Trick:** Free iPhone app “EyeChart”

The patient had taken out his contacts because of eye pain. His visual acuity is 20/200 in both eyes. How can we determine if his blurred vision is the result of the pepper spray?

**Trick:** Pinhole correction using thick paper and holes made by needles

You try to apply Morgan lens for ocular irrigation, but the patient pulls them out. How can you irrigate the eyes?

**Trick:** Nasal cannula irrigation
**Trick:** Add 10 mL of 1% lidocaine into 1 liter of saline bag

After irrigation, soft tissue swelling of the eyelid makes it difficult to get an unobstructed view. You do not have an
How do you retract the eyelids?

**Trick:**
- Paperclip eyelid retraction
- "Roll up" the upper eyelid with Q-tip
- Use benzoin to help retract the upper eyelid.

How can we check for pupillary constriction WITHOUT opening the eyelids?

**Trick:** Ultrasound using a linear traducer

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**Case 8: Peritonsillar Abscess**

23 y/o male presents with a sore throat and left-sided peritonsillar swelling.

How would you visualize the abscess during needle aspiration?

**Trick:** Use a laryngoscope with a Macintosh (curved) blade. If cooperative, have patient retract inferiorly.

How would you perform the needle aspiration?

**Trick:** Use a spinal needle with the sheath trimmed such that 1.5 cm of the needle is exposed.

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**Case 9: Vascular Access**

80 y/o woman presents in PEA arrest and the nurses are unable to establish vascular access. You begin prepping for a femoral line.

With no palpable femoral artery pulse, how do you best locate the femoral vein for a central line?

**Trick:** V-Technique - Use external landmarks where femoral vein is at "V" (1st webspace) of hand

Update: You successfully place the femoral central line! The patient is stabilized. You decide to change the line over to a subclavian central line. Fact: Most common malpositioning of subclavian catheter is into ipsilateral IJ vein (up to 10% of time)

How can you minimize the chances of your subclavian line tip ending up in the ipsilateral IJ vein?

**Trick:** “Finger in Fossa” : Occlusion of IJ with finger during guidewire part of procedure.

You unfortunately forgot to occlude the IJ vein and now you have to re-wire the line. How can you easily re-feed the curved wire into the catheter hub?

**Trick:** Stretch guidewire just proximal to curvature to straighten inner wire (which maintains the curvature)

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**Case 10: Back Pain**

A 30 y/o woman BIBA for bizarre behavior at a storefront. She arrives agitated and yelling, requiring several officers to keep her on the gurney. She has dilated pupils (7 mm), a heart rate of 140 bpm, and a history of cocaine and IV heroin use. You decide to chemically sedate her for everyone’s safety.

What IM chemical agent(s) do you use?

**Trick:** Midazolam: Most consistently IM-absorbed benzodiazepine - Quicker on / off than lorazepam IM or haloperidol IM

<table>
<thead>
<tr>
<th>Drug</th>
<th>Time to onset</th>
<th>Time to arousal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorazepam (2 mg IM)</td>
<td>32.2 min</td>
<td>217.2 min</td>
</tr>
<tr>
<td>Haloperidol (5 mg IM)</td>
<td>28.3 min</td>
<td>126.5 min</td>
</tr>
<tr>
<td>Midazolam (5 mg IM)</td>
<td>18.3 min</td>
<td>81.9 min</td>
</tr>
</tbody>
</table>

Patient update: She awakes and wants her LBP x 2 wks evaluated. She has tenderness all along T and L spine. She then curls up into a fetal position and refuses to answer any further questions.

What maneuvers could reduce your suspicion for a red-flag back pain diagnosis? GREEN FLAGS.

- **Waddell sign #1**: Axial loading of scalp
  * With patient in an upright position, apply downwards pressure on top of head.
  * Patient should NOT experience LBP.

- **Waddell sign #2**: Distracted SLR Maneuver

- **Hoover Test**: Suboptimal effort in hip flexion strength test

- **Visual miscues in hand sensory exam**

What maneuvers could RAISE your suspicion for a red-flag back pain diagnosis -- spinal epidural abscess?

- **Spinal percussion tenderness**

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**Case 11: Odors in the ED**

A 40 y/o homeless man is BIBA for being “found down”. His feet exude a malodorous smell throughout the ED. You also notice a large thigh abscess.

“Toxic Sock Syndrome”: Trapped perspiration/bacteria within socks + poor foot hygiene. In a moist, warm environment, bacteria proliferate and produce foul-smelling isovaleric acid. How do you minimize the smell of “toxic sock syndrome”?

- **Trick**: Antacid booties:
  The alkaline antacid solution neutralizes the acidic environment and thus reduces the odor.

How do you minimize the smell of pus during the I&D?

- **Trick**: Suction the pus directly into closed canister.

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