EZ - IO ADULT INTRAOSSEOUS INFUSION

INDICATIONS:

- Intravenous access is indicated
- Two (2) unsuccessful peripheral intravenous attempts
- Patient is unresponsive to verbal stimuli/unconscious AND has one of the following:
  1. Cardiac arrest
  2. Impending arrest
  3. Shock

APPROVED I.O. SITES:

1. Proximal medial tibia
2. Distal tibia (medial malleolus)
3. Proximal Humerus

CONTRAINDICATIONS

- Infection at the site selected for insertion (choose alternate site)
- Fracture of the bone selected for IO infusion (choose alternate site)
- Excessive tissue preventing identification of landmarks (choose alternate site)
- Previous significant orthopedic procedures. (IO within 24 hours, prosthesis- choose alternate site.

EQUIPMENT:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZ-IO Driver</td>
<td></td>
</tr>
<tr>
<td>EZ-IO needle set</td>
<td></td>
</tr>
<tr>
<td>10 ml syringe</td>
<td></td>
</tr>
<tr>
<td>Normal Saline IV solution</td>
<td></td>
</tr>
<tr>
<td>Dressing</td>
<td></td>
</tr>
<tr>
<td>Sterile Gloves</td>
<td></td>
</tr>
<tr>
<td>Skin prep pad</td>
<td></td>
</tr>
</tbody>
</table>

PROCEDURE:

1. Select appropriate insertion site
2. Prepare insertion site using aseptic technique
3. Identify Landmarks:
   i. **Proximal Tibia**: Palpate tibial tuberosity, move (2) fingers below and medial to it
   ii. **Distal Tibia**: Palpate medial malleolus move fingers two (2) finger width above it.
       (inside ankle bone)
   iii. **Proximal Humerus**: Adduct arm (humerus against body) with the elbow at 90 degrees, the hand on the umbilicus, and the elbow resting on ground or stretcher. Palpate the mid-shaft humerus continuing proximally toward the humeral head identifying a small protrusion, the greater tuberosity insertion site.

ALS I-18.1
4. Prepare the EZ IO driver and appropriate needle set.
5. Stabilize site and insert appropriate needle set.
6. Drill until loss of resistance is felt.
7. Remove EZ-IO driver from needle set while stabilizing catheter hub.
8. Remove stylet from catheter.
9. Confirm placement by attempting to aspirate bone marrow or blood.
10. Flush with 10 ml of normal saline.
11. Assess for signs of infiltration.
12. Begin utilizing pressure bag for infusion if IO flushes easily and no infiltration.
13. Dress site, secure tubing.
14. Monitor EZ-IO site for swelling.
15. MAXIMUM 2 ATTEMPTS (2ND ATTEMPT MUST BE AT ALTERNATE SITE)