2016 Infusion Standards

Changes from 2011 Standards of Practice

1. Insertion
   a. Assign vascular access device insertion to individuals with infusion therapy education training and validated competency. I (this is also a state rule)

2. Peripheral
   a. Use of a peripheral iv for <6 days of therapy IV
   b. No PIV for osmolarity > 900 mOsm/L IV
      i. Previously > 600 mOsm/l
      ii. Removed ph requirement of pH 5-9 only
      iii. Previous pH 5-9 only. No lower pH
   c. Selects smallest gauge piv V
      i. 20-24 for most infusion IV
      ii. 22-24 for neonates, peds and older adults V
      iii. 16-20 for rapid fluid replacement or contrast based radiology IV
      iv. 20-24 for blood
      v. Use steel winged devices for single does therapy only IV
   d. No more than 2 attempts per clinician and limit total attempts to 4 IV
   e. Tourniquets are single use 1 per patient III

3. Midline
   a. Choose for 1-4 weeks IV
b. Not for continuous vesicant therapy or > 900 mOsm/L  

4. Site Preparation  
   a. Chlorohexidine is the preferred skin antiseptic  

5. VAD Management  
   a. Avoid using a needleless connector for rapid flow rates of crystalloid solutions and red blood cells.  
   b. Scrub needleless connectors with alcohol and access immediately, while still wet  
   c. Use one passive disinfection cap per access. Once removed these must be discarded.  
   d. Change the needleless connector no less frequently than every 96 hours. More frequent changing adds no benefit and increases risk of CLABSI  
   e. Remove the needleless connector to draw blood and replace with a new one.  
   f. Use ESD (Engineered Stabalization Device) (like a stat lock) to secure PICCs or a dressing that incorporates engineered stabilization into itself.  
   g. Never re-advance a dislodged picc.  
   h. Remove short peripheral and midline iv catheters if they have not been used for 24 hours or more.  
   i. DO NOT REMOVE a cvad in the presence of a cvad-associated vein thrombosis when the catheter is correctly positioned at the cavo-atrial junction, is functioning correctly with a blood return and has no evidence of any infection. The decision to remove the CVAD should also consider the severity of deep vein thrombosis symptoms.  

The Roman Numerals at the end of the statement indicate the strength of the recommendation from the Infusion Nurses Society.

<table>
<thead>
<tr>
<th>Roman Numeral</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Meta analysis guideline based on at least 3 well designed RCT’s</td>
</tr>
<tr>
<td>I A/P</td>
<td>Evidence is from Anatomy or Physiology references as understood at the time of the writing</td>
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<tr>
<td>II</td>
<td>Two well designed RCTs or systematic literature review of the varied prospective study designs</td>
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<tr>
<td>III</td>
<td>One well designed RCT, several well designed clinical trials without randomization or 2 well designed laboratory studies</td>
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<tr>
<td>IV</td>
<td>Well designed quasi experimental study, case control study, cohort study. Includes 1 well-designed laboratory study</td>
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<tr>
<td>V</td>
<td>Clinical article, book, consensus report, case report, guideline based on consensus</td>
</tr>
<tr>
<td>Regulatory</td>
<td>Based on regulations from another Governing body with the ability to impose consequences.</td>
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</tbody>
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Examples of cytotoxic drugs that injure the veins
- Macrolides (erythromycin, azithromycin)
- Quinolones (ciprofloxacin, levofloxacin)
- Penicillinase-resistant penicillins (nafcillin, oxacillin)
- Penems (imipenem, meropenem)
- Quinupristin/dalfopristin (Synercid ®)
- Amphotericin B
- Vancomycin
- Foscarnet
- Antineoplastics (cladribine, mitomycin)
- Steroids (reversible)
- Cyclosporin (reversible)
- Pamidronate