Policies and Procedures

Policy Subject/Title: Intramuscular Injection in Pediatric Patients
Applicability: Pediatric Patients
Purpose: To provide education to the staff regarding the standard of care expected to be provided to pediatric patients receiving intramuscular injections.

Policy

Intramuscular injections are administered according to established procedure in pediatric patients.

Procedure

***Always Check for Allergies First

1) Verify the order with the medical record.
2) Wash hands.
3) Obtain medication and read the label to verify with the order. Check for expiration date: if expired, do not administer.
4) Check the amount of medication to be administered to determine syringe size and appropriateness for the child. Limit volume according to the age of the child and the size of the muscle used. (See Table A) Maximum volume to be administered in a single site is 1 mL for older infants and small children. Use a low-dose 1-mL syringe to give volumes of less than 0.5 mL.
5) Choose appropriate needle length for the site and muscle size. (See Table A) Select gauge based on what is available for the appropriate needle length for the child and medication viscosity, usually a 22- or 23- gauge needle.

Table A: Intramuscular Administration

<table>
<thead>
<tr>
<th>Site</th>
<th>Age</th>
<th>Needle Length</th>
<th>Volume</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vastus lateralis</td>
<td>Infant</td>
<td>% inches</td>
<td>0.5 mL</td>
<td>Recommended by AAP for infants younger than 7 months of age</td>
</tr>
<tr>
<td></td>
<td>Toddler</td>
<td>% - 1 inch</td>
<td>0.5 - 1 mL</td>
<td>Muscle easy to identify, site is Easy to access and secure</td>
</tr>
<tr>
<td></td>
<td>Preschool-aged</td>
<td>1 inch</td>
<td>1 mL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School-aged</td>
<td>1 inch</td>
<td>1.5 - 2 mL</td>
<td></td>
</tr>
<tr>
<td>Deltoid</td>
<td>Infant, not</td>
<td>% - 1 inch</td>
<td>0.5 mL</td>
<td>Muscle mass limited</td>
</tr>
<tr>
<td></td>
<td>Recommended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toddler,</td>
<td></td>
<td></td>
<td>More rapid medication</td>
</tr>
<tr>
<td></td>
<td>preschool-aged</td>
<td></td>
<td></td>
<td>absorption than gluteal region</td>
</tr>
<tr>
<td></td>
<td>School-aged</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6) Draw up correct amount of medication into the syringe. If there is a large volume of medication, more than one injection may need to be given.
7) Document medication to be given onto Medication Log. Take syringe with medication to the child to administer.
8) Apply non-sterile gloves. Determine the site of injection; make certain muscle is large enough to accommodate volume and type of medication. If multiple injections are to be given, rotate injection sites.
9) Place the child in a lying or sitting position; the child is not allowed to stand due to difficulty in assessing landmarks, more difficult to restrain, or the child may faint and fall.
Intramuscular Injection Procedure

10) Have a second person present to help position and hold the child to prevent injuries to the patient or others.
11) Clean the site with an antiseptic swab using a circular motion starting at the center of the site and moving outward for about 2 inches. Allow to dry.
12) Insert the needle into the skin at a 90° angle. Aspirate by pulling back on the plunger. If blood appears withdraw the needle and discard the syringe and solution appropriately. Prepare a new injection and repeat the steps to administer the injection.
13) Inject medication slowly over several seconds.
14) Remove needle quickly. Apply firm pressure with dry gauze to the site after injection; massage the site to hasten absorption.
15) Place adhesive bandage over site.
16) Dispose of the syringe in a sharps container immediately after use. **DO NOT RE-CAP THE NEEDLE.**
17) Remove gloves and wash hands.
18) Document the medication that you administered, its name, dosage, time, route of administration, how the patient tolerated the injection and sign with your complete signature.

Resource:
*Wong and Whaley's Clinical Manual of Pediatric Nursing, ed.5*
*Bowden and Greenberg's Pediatric Nursing Procedure, ed. 1*

Enclosure:
Medication Log