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ACTIVITY 3

1) It is immunization day at the health center. The first patient is a 2-month old well female infant who is scheduled for the following vaccinations: pneumococcal conjugate vaccine (PCV), pentavalent vaccine (Penta) and oral polio vaccine. PCV and Penta are given via intramuscular route. Where are the sites of injection? What muscle is targeted in the injection? Write down its origin, insertion and action. How do you locate this area?

	SITE OF INJECTION	MUSCLE TARGETED	ORIGIN, INSERTION, AND ACTION	HOW TO LOCATE:
Injection via Intramuscular route	anterolateral thigh, halfway down the vastus lateralis	Vastus lateralis	<p><i>Origin:</i> greater trochanter and linea aspera of femur</p> <p><i>Insertion:</i> patella via quadriceps tendon and then tibial tuberosity via patellar ligament.</p> <p><i>Action:</i> all four heads extend leg at knee joint; rectus femoris muscle acting alone also flexes thigh at hip joint.</p>	Palpate the muscle under the greater trochanter and above the lateral femoral condyle (knee joint).

2) The baby's 65-year-old grandfather also came to the center because influenza vaccine is being offered to senior citizens. The flu vaccine is given intramuscularly. Which muscle is the preferred site for IM injection in this case? Write down its origin, insertion and action. How do you locate this area?

	SITE OF INJECTION	MUSCLE TARGETED	ORIGIN, INSERTION, AND ACTION	HOW TO LOCATE:
Injection via Intramuscular route	Give in the central and thickest portion of the deltoid muscle – above the level of the armpit and approximately 2–3 fingerbreadths (~2") below the acromion process.	Deltoid muscle <i>(Alternative: Anterolateral thigh or vastus lateralis)</i>	<p><i>Origin:</i> Acromial extremity of clavicle (anterior fibers), acromion of scapula (lateral fibers), and spine of scapula (posterior fibers).</p> <p><i>Insertion:</i> Deltoid tuberosity of humerus.</p>	Deltoid muscle: Palpate the lower edge of the acromion process, which forms the base of a triangle in line with the midpoint of the lateral aspect of the upper arm. Create

			<p><i>Action:</i> Lateral fibers abduct arm at shoulder joint; anterior fibers flex and medially rotate arm at shoulder joint; posterior fibers extend and laterally rotate arm at shoulder joint.</p>	<p>the base form of a triangle by measuring 2 to 3 fingers down from the acromion process. The bottom point or the peak of the triangle is located at the level of the axilla.</p>
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References:

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