

Procedure for subcutaneous injection

Essential equipment

- 70% alcohol 2% chlorhexadine swab
- Safety needle 25g (orange)
- Syringe containing prepared medication
- Sharps bin and tray

Preprocedure

Action	Rationale
1 Explain and discuss the procedure with the patient.	To ensure that the patient understands the procedure and gives their valid consent (Griffith and Jordan 2003 , E; NMC 2008b , C; NMC 2008c , C).
2 Consult the patient's prescription chart and ascertain the following: (a) Drug (b) Dose (c) Date and time of administration (d) Route and method of administration (e) Diluent as appropriate (f) Validity of prescription (g) Signature of doctor.	To ensure that the patient is given the correct drug in the prescribed dose using the appropriate diluent and by the correct route (NMC 2008a , C; NPSA 2007d , C).
3 Wash hands with bactericidal soap and water.	To prevent contamination of medication and equipment (DH 2007 , C).

Procedure

<p>4 Close the curtains or door and assist the patient into the required position.</p>	<p>To ensure patient's privacy and dignity. E</p> <p>To allow access to the appropriate injection site (Perry 2007, E).</p>
<p>5 Remove appropriate garments to expose the injection site.</p>	<p>To gain access for injection. E</p>
<p>6 Assess the injection site for signs of inflammation, oedema, infection and skin lesions.</p> <p>Wash hands with bactericidal soap and water or 70% alcohol handrub.</p>	<p>To promote effectiveness of administration (Perry 2007, E).</p> <p>To reduce the risk of infection (Fraise and Bradley 2009, E; Workman 1999, E).</p> <p>To avoid skin lesions and possible trauma to the patient (Perry 2007, E).</p>
<p>7 Pinch the skin of the area and select the correct needle size.</p>	<p>To minimize the risk of missing the subcutaneous tissue and any ensuing pain (Perry 2007, E).</p>
<p>8 Clean the injection site with a swab saturated with alcohol 2% chlorexidine and allow to air dry for 30 seconds.</p>	<p>To reduce the number of pathogens introduced into the skin by the needle at the time of insertion. (For further information on this action see Skin preparation.)</p>
<p>9 Gently pinch the skin up into a fold.</p>	<p>To elevate the subcutaneous tissue, and lift the adipose tissue away from the underlying muscle (Perry 2007, E).</p>
<p>10 Remove the needle sheath and hold syringe between thumb and forefinger of dominant hand as if grasping a dart.</p>	<p>To enable a quick smooth injection (Perry 2007, E).</p>
<p>11 Insert the needle into the skin at an angle of 45° and release the grasped skin (unless administering insulin when an angle of 90° should be used). Inject the drug slowly.</p>	<p>Injecting medication into compressed tissue irritates nerve fibres and causes the patient discomfort (Perry 2007, E).</p> <p>The introduction of shorter insulin needles makes 90° the more appropriate angle (Trounce and Gould 2000, E).</p>
<p>12 Withdraw the needle rapidly. Apply gentle pressure. Do not massage area.</p>	<p>To aid absorption. Massage can injure underlying tissue (Perry 2007, E).</p>

Postprocedure

<p>13 Ensure that all sharps and non-sharp waste are disposed of safely at the patient's bedside.</p> <p>Wash hands with bactericidal soap and water or 70% alcohol handrub.</p>	<p>To ensure safe disposal and to avoid laceration or other injury to staff (MHRA, 2004, C; DH, 2005b, C).</p> <p>To reduce the risk of cross infection.</p>
<p>14 Record the administration on appropriate sheets.</p>	<p>To maintain accurate records, provide a point of reference in the event of any queries and prevent any duplication of treatment (NMC 2008a, C; NMC 2009, C; NPSA 2007d, C).</p>

<http://www.rmmonline.co.uk/home.html>; accessed 8/10/13