

B-1

INTRAMUSCULAR INJECTION

INTRODUCTION

It is a technique used to deliver a medication deep into the muscles. It is one of the commonest ways of administering medications parenterally.

LEARNING OUTCOME

The student will be able to administer intramuscular injection

SKILLS

Motor

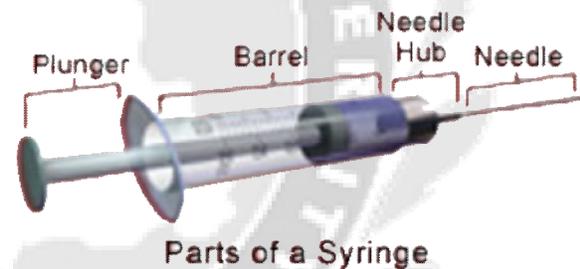
LEARNING OBJECTIVES

At the end of the session, the learner should be able to:

- Recognize different sites for intramuscular injection
- demonstrate the proper technique of administering intramuscular injection

EQUIPMENT/ MATERIAL REQUIRED

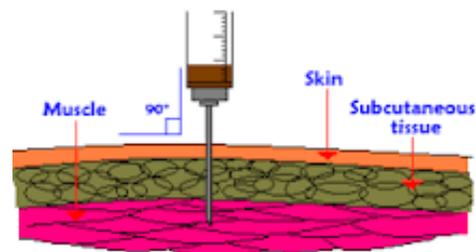
- Alcohol swabs
- Syringe (21 or 23 G)
- Medication to be injected
- Band-aid/Saniplast)



STEPS

a. PREPARATION

- Introduce yourself
- Confirm identity of the patient
- Take informed consent
- Inquire about allergies
- Check prescription, expiry date and any discoloration of the medication
- Select the site for injection and position the patient accordingly
 - Sitting for deltoid
 - Prone or lateral for gluteal / vastus lateralis



b. PROCEDURE FOR INJECTION

- Wash your hand and don gloves
- Draw the medication into the syringe
- For gluteal injection, arbitrarily divide the gluteal region into four quadrants. Give injection in upper outer quadrant of the buttock. For deltoid, identify a point 2-5 cm below the greater tuberosity. For vastus lateralis, divide the thigh horizontally into three quadrants. Injection will be given in the middle quadrant on the antero-lateral surface.
- The chosen site should be free of scars or infection
- Clean the site with an alcohol swab and allow it to dry.
- Tether the skin with your thumb and index finger and insert the needle straight into the muscle mass.
- Pull the plunger back, and if noting any blood, withdraw the needle and change the site and the needle. If no blood is seen, inject the medication.
- After the entire injection is given, pull the needle out and dispose it properly in a sharps container
- Use the alcohol swab to clean any blood, if necessary, and apply band-aid/sanipalst.
- Wash your hands

SITES FOR I/M INJECTION

The three most commonly used sites for intramuscular injections are,

- Upper arm (Deltoid)
- Buttock (Gluteal muscle)
- Antero-lateral aspect of thigh (in children)

CONTRAINDICATIONS

- Thrombocytopenia
- Coagulopathy
- Any infection at the site of administration

COMPLICATIONS

- Trauma to nerves (radial nerve in deltoid and sciatic nerve in gluteus muscle)
- Infection
- Hematoma
- Minor discomfort and pain

