

## **DEFINITION OF REFLEX**

A reflex is an involuntary, predictable, and specific response to a stimulus dependent on an intact reflex arc. (A reflex arc is a neural pathway that controls a reflex)

OR

An action that is performed without conscious thought as a response to a stimulus.

REFLEX ARC

REFLEX HAMMER

### **PARTS**

- 1) Apex
- 2) Base
- 3) Blunt
- 4) Pointer
- 5) Brush

The hammer strike should be quick, direct, crisp and forceful, but no greater than necessary.

The blow is delivered quickly with a flick of the wrist, holding the handle of the hammer near its end and letting its spin through loosely held fingertips.

Wrist and elbow motion.

The patient should be comfortable, relaxed and properly positioned. It may help relaxation to divert the patients attention with light conversation.

### **TYPES OF REFLEXES**

- 1) Superficial reflexes
- 2) Deep Tendon reflexes(DTR)

## 1) Superficial Reflexes

Are elicited with a light stroke applied to the skin. Clinical importance of superficial reflexes-

- a) In peripheral nerve, neuromuscular junction disorder superficial reflexes are normal.
- b) In muscle disorder superficial reflexes are normal, depressed or absent in involve nerve.
- c) In UMN disorder superficial reflexes are depressed or normal or slightly increased.
- d) In cerebellar disorder superficial reflexes are normal.
- e) In psychogenic disorder superficial reflexes are normal.

## 1) Corneal Reflexes(CN 5)

## 2) Conjunctival Reflexes(CN 5)

## 3) Abdominal reflexes(T8-T12)

## 4) Plantar reflexes(S1,S2)

It is tested by tapping sharply over muscle tendon with a standard reflex hammer or with the tips of the therapist's finger.

Stimulation can result in observable movement of the joint.

## 2) Deep Tendon Reflexes

### 1) Jaw jerk(CN 5)

- 2) Biceps jerk(C5, C6)
- 3) Tricep jerk(C6,C7)
- 4) Supinator reflex(C5, C6)
- 5) knee (Quadriceps) jerk(L2, L3, L4)
- 6) Ankle(Achilles) jerk(S1,S2)

If DTR are difficult to elicit, the responses can be enhanced by specific reinforcement manoeuvre- Jendrassik Maneuver.

It is tested by tapping sharply over muscle tendon with a standard reflex hammer or with the tips of the therapist's finger.

Stimulation can result in observable movement of the joint.

SCALE/ GRADES (To Assess deep tendon reflexes)

0 = No response

1+ = Present but depressed, low normal

2+ = Average, Normal

3+ = Increased, brisker than average; possibly by necessarily abnormal.

4+ = Very brisk, Hyperactive, with clonus; abnormal