Common Postural Deformities And Their Corrective Measures

1. KNOCK KNEE

Symptoms: -
Knees touch each other in standing position.
Knees touch each other in walking.
Knees touch each other in running.

Causes: -
- Obesity
- Deficiency of vit D
- Rickets
- Early age walks or standing
- Malnutrition
- Enlargement of medial ligament of both knees quickly as compare to lateral ligament.
- Heavy load for long time.

Corrective Measures: -
- Horse riding
- Padamasana
- Standing with pillow between the knee
- Use walking calliper
- Straight leg lift.
- Straight leg knee press on the towel placed under the knee
- Side kicking the football

2. FLAT FOOT.

Symptoms: -
-- Pain in mid part of feet during standing & walking.
-- Disappearing the long arch of the feet
-- Complete feet print can be seen on the floor.

Causes: -
-- Weakness of muscles & bones.
-- Over weight
-- Obesity
-- Carrying heavy load for long time.
-- Injuries
-- Malnutrition
-- Faulty shoes.

**Corrective Measures:**

-- Writing with legs
-- Walking or running on the sand.
-- Jumping on toe
-- Wearing proper shoes
-- Pick the pebble with help of feet
-- Walking on toe
-- Tadasana
-- Vajra-asana
-- Ball Ball under the feet game
-- Wear the shoe with hanky inside the mid part of the feet.

**3. ROUND SHOULDERS**

**Symptoms:**

-- Shoulder become round & tilt forward
-- Neck tilt in forward direction.
-- Down shoulders.

**Causes**

Wrong habits
-- Tight clothing.
-- Faulty furniture
-- Profession

**Corrective measures**

-- Dhanurasana
-- Chakarasana
-- Bhujang asana
-- Reverse bending on the swissball
-- Reverse butterfly
-- Pillow neck extension
-- Downword dog pose (adho mukh Svanasana)
-- Camel pose (Ustra sana)
-- Half wheel pose (Ardh Chakrasana)
4. LORDOSIS

Symptoms:

- Forward & downward tilt pelvis
- A large gap between the lower back & the floor when laying in supine line position.
- Pain in lower back
- The length of lower back muscles gets shortened.
- Abdomen at lumber region tilt forward.

Causes

- Due to weakening of the bones.
- Due to the loose abdominal muscles.
- Bad posture.

Corrective Measures

- In order to cure the lordosis those types of exercises are suggested, which increase the length of lower back muscles & strengthen the abdominal muscles such as.
  - Sit ups < Bent knee Straight legs
  - Leg raises
  - Halasana
  - Good morning exercises
  - Nauka Asana
  - Paschimotanasana
  - Cycling
  - Obligue crunches
  - Lower back muscle stretch
  - Lunges
  - Mountain climbing exercises
  - High jumps on the spot (knees touch the chest)
  - Bending down ward
  - Alternate toe touch
5. KYPHOSIS

Symptoms:

- Distance between the scapula increase.
- The length of the chest muscles become short.
- Shoulders tilt forward.
- Neck tilt forward
- Upper Body wt. lean forward.

Cause

- Defective vision or incorrect spectacles the habit of leaning forward while writing or reading.
- People hard of hearing often develop the habit of craning forward to assist their hearing.

Corrective Measures:

- Back stroke swimming.
- Chakar Asana
- Bhujang Asana
- Dhanur Asana
- Reverse bending on the swiss ball
- Reverse butterfly
- Pillow back extension
- Marjaryasana (cat pose)
- Adhomukha svanasana (Down word dog pose)
- Ustrasana (Camel pose)
- Half wheel pose (Ardha chakra-asana)

6. BOW LEG

Symptoms:

- Gap between the knees are increased
- Knee moves in outward direction in standing, walking & running
- Shape of legs look like the bow.

Causes:

- Enlargement of lateral ligament of both knees quickly as compare to medial ligament.
- Weakness of bones and muscle.
- Long-time cross leg sitting.
- Faulty style of Walking.
Obesity
-- Rickets
-- Early age standing and walking.

Corrective measures: -
-- Walking (feet twisted inward)
-- Use of walking callipers.
-- Massage therapy.
-- Use those exercise which strengthen the muscles surrounding
the knee such as leg extension in laying position.
-- Use yoga strap to bind the legs together then make cow face
posture & forward bending are recommended.
-- Pilate exercise such as roll up & ballerina arms are effective
to tone legs.
-- Garud Asana, Ardh-Matsyendrasana

7. SCOLIOSIS

Symptoms: -
-- One shoulder up & one down-- Pelvis - One side up & one down.
-- Body Weight uneven on both legs.
-- Body seems to bend one side.

Causes: -
-It is often cause due to some diseases or injuries such as cerebral palsy.
-It may be the result of weakening of the spinal muscles of one side and the strengthening of the muscles of
the other side.

Corrective measures:
-- Breast stroke swimming
-- Trikon Asana
-- Hanging on Horizontal bar
-- Streaching exercises in which down shoulder goes up.
-- Perform down ward facing stretches.
<table>
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<tr>
<th>No.</th>
<th>Condition</th>
<th>Causes</th>
<th>Precautions</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Round Shoulders</td>
<td>Poor posture in work, sitting on improper furniture, tight clothes, wrong habit of sitting and standing.</td>
<td>Avoid tight clothes, use proper furniture, never sit, stand, walk in bent back position.</td>
<td>Chakrasana, keeps tips of fingers on shoulders and rotate elbows clockwise - anticlockwise, lay weight over abdomen, hold horizontal bar for sometime.</td>
</tr>
<tr>
<td>2</td>
<td>Lordosis</td>
<td>Not getting balanced diet, more food than required, women giving birth to many children, habit formation during growing period.</td>
<td>Balanced diet, maintain weight, no-ex avoid extra food, body should be kept straight while carrying weight.</td>
<td>Toe touching (at least 10 mins), sit ups regularly, Paschimottan asana, lie down on back, raise head legs together.</td>
</tr>
<tr>
<td>3</td>
<td>Kyphosis</td>
<td>Spinal curvature deformity, in this, shoulders come forward and downward, neck bends forward, body weight shifted forward, problem also known as hunch back.</td>
<td>Adept correct posture, wear loose clothes, use suchable furniture, do not bend body while reading.</td>
<td>Keep pillow under neck, while sleeping, Chakrasana, swimming, avoid curvatures at shoulder level.</td>
</tr>
<tr>
<td>4</td>
<td>Scoliosis</td>
<td>Heredity, difference in length of legs, stand in correct posture.</td>
<td>Balanced diet, cultivate furniture, stand in correct posture.</td>
<td>Trikonasana, Ardha Chakrasana, baddha...</td>
</tr>
</tbody>
</table>
Multiple Choice Question (1 Mark)

a. Deformity means
(a) The malformation of any component of the body [ ]
(b) The malfunction of body’s organs [ ]
(c) The malfunction of joints of the body [ ]
(d) De-sapped of muscles [ ]

b. Lordosis deformity is
(a) Lateral curvature of the spine [ ]
(b) Arch of sole of feet [ ]
(c) Abnormal backward curvature of the thoracic region of the spine [ ]
(d) Aggraved lower curvature of the lumbar region [ ]

C. Scoliosis is postural deformity where the person body position become-
(a) Lateral curvature of the spine [ ]
(b) Arch of sole of feet [ ]
(c) Wide gap between the knees [ ]
(d) A side way curvature of the spine [ ]

d. What are the causes of “flat foot”.
(a) Weak muscles of the foot [ ]
(b) Improper shoes of carry heavy weight [ ]
(c) Healthy muscles of the body [ ]
(d) Both (a) & (b) [ ]

e. Choose correct one

1. flat foot a. wide gap
2. Knock knee b. inward bent
3. Bow legs c. Abnormal arch
(a) 1–a, 2–b, 3–c [ ]
(b) 1–c, 2–a, 3–b [ ]
(c) 1–c, 2–b, 3–a [ ]
(d) 1–b, 2–a, 3–c [ ]

e. A B
1. Round shoulder a. Abdomen is ahead of body
2. Scoliosis b. sideways curvature of the spine
3. Lordosis c. Forward rounding of upper back
4. Kyphosis d. forward bending of shoulder
Sports Participation of Women in India

Sports Participation of women means women Participation in the field of sports and games. In 1952 Olympic games, the first India women took part. In 2000 Olympia games, Karnam malleshwari (weight lifting) become the first Indian women to have won a bronze medal.

Factors responsible for less participation of women in the field of sports

Physical factors
1. Lack of fitness and wellness
2. Female Athlete Traid

Psychological factors
1. Lack of confidence
2. Lack of interest of spectators
3. Less no. of female coaches
4. Less media coverage
5. Personal safety
6. Less education of women

Sociological factors
1. Lack of legislation
2. Lack of time for sports activity
3. Male dominated Culture in the sports
4. Attitude of society towards women in sports participation

Multiple Choice Questions – 1Mark
1. Select the correct reason for less participation of female in sports.
   (a) Low physical fitness [ ]
   (b) Lack of education [ ]
   (c) Good Legal system [ ]
   (d) (a) & (b) both [ ]

2. Select the correct reason to improve participation of female in sports
   (a) Good legal system [ ]
   (b) Female role model [ ]
(c) Both (a) & (b) [ ]
(d) Improper motivation [ ]