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## PREVENTION AND CURE OF COMMON POSTURAL DEFORMITIES WITH THE HELP OF PHYSICAL ACTIVITIES AND YOGA

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Abstract: In this modern age, Parent is not giving proper attention to their children. There are different types of equipments affecting their childhood physical activity and children are engaged in different types of bad habits like unnecessary sitting to play computer games and watching television which causes different physical deformities. Unnecessary work load like weight of school bag, home work, lack of physical activity etc. If we do not improve such poor activities then child will suffer with different postural deformities and this will come as a hazardous problem in front of them. After that they will lose their confidence and it also affects their social life in future.

Keywords: Physical Activity, Postural Deformities, Yoga

**Introduction:** The need of posture education is felt at all levels of life. But it will be very appropriate if the same is realized at the very young age that is at the childhood stage when the child starts schooling. At this stage the importance of good posture should be emphasized in such a way that the school going child develops a habit of learning the importance of good posture. He learns how to walk how to sleep how to sit and above all how to apply the fundamentals of good posture in every step of life. Good posture is important for all of us. Good posture makes you look better. The posture habits learnt when you are young can stay with you throughout your life.

### Various Types of Postural Deformities

- Spinal curvature
- Flat foot
- Knock knees
- Bow legs
- Round shoulders



**Spinal Curvature:** This type of deformity is related to spin. This deformity is caused by carrying excessive weight beyond capacity. In another way we can say that weak muscles cause the formation of spin curvature. The normal lumbar spine is characterised by a moderate anterior hyperextension curve, when viewed laterally. Although there is absolute standard for the determination of the degree or extent of the anterior convexity of the normal lumbar curve. There are three types of spinal deformities-

- Kyphosis
- Lordosis
- Scoliosis

**Kyphosis:** Kyphosis implies an increase or exaggeration of a backward or posterior curve or a decrease or reversal of a forward curve. It is also called round upper back. Depression of chest is common in Kyphosis.

**Causes of Kyphosis:** Kyphosis is caused by malnutrition, illness, crowd, deficiency of pure air, insufficient exercises, rickets, carrying heavy loads on shoulders, unsuitable furniture, weak muscles and habit of doing work by leaning forward etc.

**Remedies:** Sit in a chair, your buttocks should touch the back of chair. By looking upward, hold your hands each other behind the back in such a way that your shoulders may remain in stretch

backwards. Remain in this position for some time. Always keeps a pillow under your back while sleeping. Bend your head backward in standing position Perform the dhanurasana regularly.

Lay down in front lying position keep your hands near the shoulders. Now straighten up your arms slowly, raise the chest. Head should be backwards. Maintain this position for some time. Hold your arms out at shoulder level and bend elbows. Snap elbows back return to starting position. Repeat this exercise at least 8 times for the best results



**Lordosis:** Lordosis is the inward curvature of spine. In fact, it is an increased forward curve in the lumber region. It creates problem in standing and walking. The body seems to be stiff. The individual feels shame and inferiority. Lordosis can be corrected in an early stage.<sup>[1]</sup>

**Causes of Lordosis**: Generally imbalanced diet, improper environment improper development of muscles, obesity and diseases affecting vertebrae and spinal muscles are such causes which result in lordosis. In addition to these causes, not performing exercises and taking excessive food are also major causes of Lordosis.



**Remedies**: From standing position bend forward from hip level. Repeat this exercise ten times. Lay down your back; raise your head and legs simultaneously for 10 times. Perform sit-ups

regularly. Halasana should be performed regularly. You should lay down in supine position, on your back, then should raise your legs at 45 degree angle. Remain in this position for some time. Toe touching should be performed for at least 10 times. Sit down and extend your legs forward. Try to touch your forehead to your knees. Repeat this exercise 10 times.

**Scoliosis:** Postural adaptation of the spine in lateral position is called scoliosis. Scoliosis means bending, twisting or rotating. In fact, these are sideways curves and may be called scoliosis curves. These are defined in terms of their convexities. They are identified as either convexity right or right convexity. A simple or single curve to the left or convexity left is commonly called a 'C' curve. Scoliosis curve may be found in 'S' shape.

**Causes of scoliosis:** Scoliosis may be because of a lot of reasons but the main reasons are disease in the joints of bones, under developed legs, infantile paralysis, rickets etc. It may also be due to carrying heavy weights on one shoulder unhealthy conditions, like inadequate lightening arrangement, unsuitable desks, partial deafness and wrong standing posture. It may be caused by congenital or acquired abnormalities of vertebrae, muscles or nerves.<sup>[2]</sup>



**Remedies:** Bending exercise should be performed in opposite side of 'c' shaped curve. Hold the horizontal bar with your hands and swing your body to the left and right side. To swim by using breast stroke technique Virabhadrasana ,Trikonasana and Marjariasana the yogic asana regularly.

**Flat Foot:** Flat foot is generally found among newly born babies but it becomes a postural deformity if it still persists during lateral childhood. The children with flat foot deformity cannot be efficient sportspersons. Such children feel pain in feet. They face problem in standing and walking. It is easy to observe whether a person has flat foot deformity or not. Dip your feet in water and walk on the floor. If there is not a proper arch of footprints on the floor then you have the deformity of flat foot. In fact, there should be proper arch of the feet

**Causes of Flat Foot:** The main cause of flat foot is weak muscles. Weak muscles of the foot cannot bear the body weight. Hence, feet become flat or without arches. Along with this rapid increase in body weight, improper shoes, carrying heavy weight for a longer period are also the cause of flat foot.

Normal Pes planus

#### Remedies

- Walking on heels
- Walking on inner and outer side of feet
- · Walking on toe
- To perform up and down the heels
- Jumping on toes for some time.
- To skip on rope
- To perform Vajrasana, the yogic asana





**Knock Knees:** The Knock knees are one of the major postural deformities. In this deformity, both the knees knock or touch each other in normal standing position. The gap between ankles goes on increasing. The individual faces difficulty in walking and running. He cannot walk or run in a proper manner. Owing to this deformity, they cannot be good players and even they are not selected in defence services.<sup>[3]</sup>





Normal

Knock knees (valgus)

**Causes:** Generally, the lack of balanced diet especially vitamin-D, calcium and phosphorus is the main cause of knock knees. It may also be due to rickets. Chronic illness, obesity, flat foot and carrying heavy weight in early age may be other possible causes of knock knees.

**Remedies:** Horse riding is the best exercise for remedification of this deformity. Perform Padmasana and Gomukasana regularly for some time. Cod liver may be beneficial in reducing this deformity up to some extent. Keep a pillow between the knees and stand erect for some time. Use of walking callipers may also be beneficial. In severe cases, consult the doctor

**Bow Legs:** Bow legs' is also a postural deformity. It is opposite to knock knees position. If there is wide gap between the knees when standing with feet together, the individual has bow legs. In this deformity, the knees are widely apart. There remains a wide gap between knees when a bow legged person keeps his feet together. This deformity can be observed easily, when an individual walks or runs.



**Causes:** The main cause of bow legs is the deficiency of calcium and phosphorus in bones. Long bones of legs become soft, hence they are bent outwards. The chances of bow legs also increase when the children become overweight. This deformity may be because of the deficiency of vitamin 'D', improper way of walking and forcing the babies to walk at very early age may also lead to bow legs<sup>[4]</sup>.

#### Remedies

- Vitamin 'D' should be taken in required amount.
- Balanced diet should be taken.
- Bow legs can be corrected by walking on the inner edge of the feet.
- Walking by bending the toes in ward

**Conclusion:** On the basis of above mentioned facts Parents may be suggested to look after their children's activities and improve them as much as possible. They are also responsible to teach

them correct body posture like walking, sitting, standing etc. They have to teach them to perform different physical activities and yoga to improve their postural deformities which will help them to live happy fruitful and healthy life in future.

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