



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2016; 1(1): 100-103

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www.theyogicjournal.com

Received: 28-05-2016

Accepted: 29-06-2016

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Body mechanics and Yoga – A remedy for back pain

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Abstract

Back pain is the leading cause of incapacity world-wide and is the most common reason for people to miss work. Back ache is so frustrating that people go for different types of treatment procedures which put them in financial strain and distress. Though back ache can be related to some serious disease or some other serious condition which require surgical procedures most of the time it is just lack of muscular strength and lack of flexibility at back. It is found that the most common reason for back ache world-wide is poor body mechanics and lack of physical fitness. Thus simple exercises to develop flexibility and muscular strength and knowledge and practice of correct body mechanics will help people to prevent and get rid of back ache. In this informative research paper the author has put an effort to come out with correct body mechanics and yogic asanas to prevent and manage backache.

Keywords: Back ache, Muscular strength, Flexibility, Body mechanics, Yogic asanas

Introduction

Back pain is one of the leading causes of distress in people of all ages. After the age of 30 most people suffer from back ache at least once in a life time. The good point of back pain is that it could be prevented as well as relieved. Back pain need to be diagnosed to rule out about other possibilities of diseases. If back pain is due to lack of muscle strength and flexibility at back as it would be in most of the cases it could be managed very well with body mechanics and exercises. Proper physical activity with good food and positive mind set can make all the difference. Most of the time, the underlying reason for back ache is lack of muscle strength or flexibility at back muscles. Once the muscle strength and flexibility is gained back pain could be relieved. Simple and regular exercise and correct body mechanics often heal ones back within a few weeks and keep it functional.

Understanding back ache

Signs and symptoms of back pain can include

- Pain in the muscles of back
- Shooting or stabbing pain at back.
- Pain that radiates down the leg
- Pain that worsens with bending, lifting, standing or walking.
- Pain that improves with reclining

Causes of back pain

- **Lack of exercise:** Weak, unused muscles in your back and abdomen might lead to back pain.
- **Excess weight:** Excess body weight puts extra stress on your back.
- **Poor posture:** wrong way of lying, sitting, standing and walking.
- **Psychological conditions:** People prone to depression and anxiety appear to have a greater risk of back pain.
- **Muscle or ligament strain:** Repeated heavy lifting or a sudden awkward movement can strain back muscles and spinal ligaments. If you're in poor physical condition, constant strain on your back can cause painful muscle spasms.
- **Arthritis:** Osteoarthritis can affect the lower back. In some cases, arthritis in the spine can lead to a narrowing of the space around the spinal cord, a condition called spinal stenosis.

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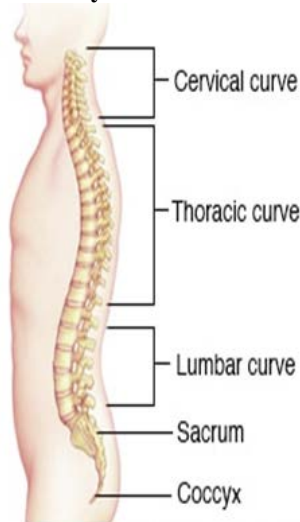
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- **Osteoporosis:** Your spine's vertebrae can develop compression fractures if your bones become porous and brittle.

Understanding Body mechanics

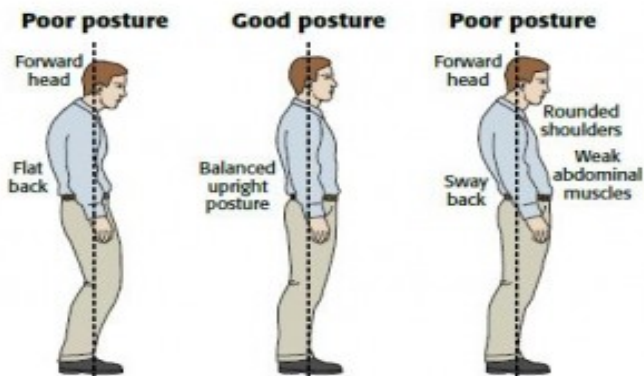
- Good posture involves positioning your body to walk, stand, sit, or lie in a position that places the least amount of strain on the supporting muscles and ligaments of your body.
- Correcting your posture may feel awkward at first because your body has become so used to sitting and standing in a particular way but with a bit of practice, good posture will become a second nature and help your back in the long run.

Normal curves of our body



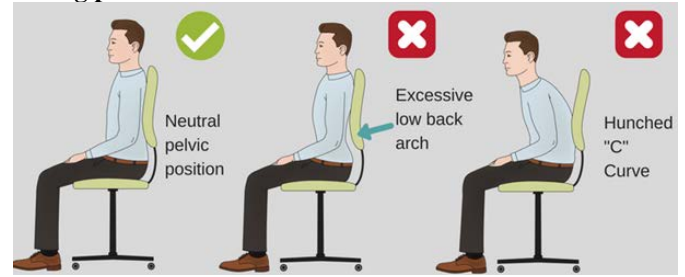
Our body has three normal curves namely, Cervicle curve, thoracic curve and lumbar curve. Any change in these curves results in poor weight adjustment and it may result in pain and misalignment of the body. Our body movements should be such that it maintains these three curves. Straightening or farthing curving of these curves proves to be painful and leads to bad posture.

Standing posture



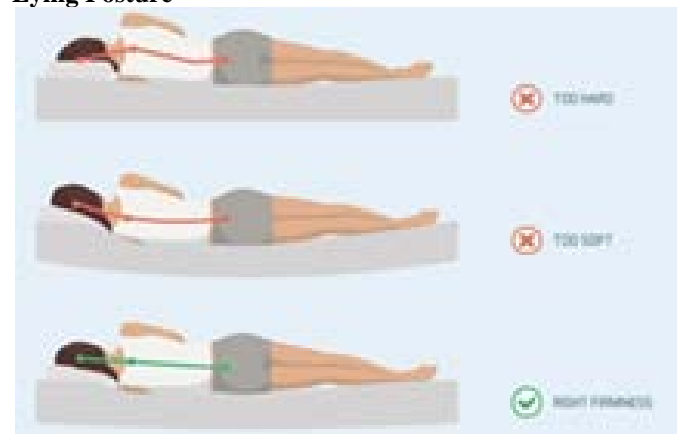
While standing keep the legs shoulder width apart and shoulders pulled back. If a plum line is drawn it should pass through your ear lobes, shoulder, mid lateral side of the hip, knees, and center of feet. If you are standing for a long time you can keep one foot over a low stool to ease of the strain at sacroiliac joint.

Sitting posture



While sitting always keep the back of the hip close to the back support of the chair. The knees should be parallel to the hip. Feet should properly rest on the floor. Bending forward or sitting with back erect is not advisable. If one has to sit for long hours, moving in between is advisable.

Lying Posture



- The best lying posture is lying on the sides. It also provides relief to individuals suffering from back ache. A pillow of proper size must be kept underneath the head to keep the spinal column in a straight line.

Preventing back pain

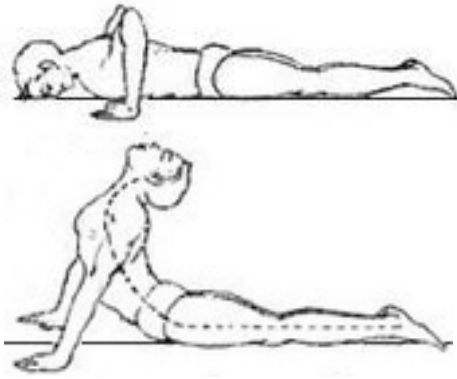
One can avoid back pain or prevent its recurrence by improving physical condition and learning and practicing proper body mechanics. To keep your back healthy and strong we must

- Exercise. Regular low-impact aerobic activities — those that don't strain or jolt your back — can increase strength and endurance in your back and allow your muscles to function better. Walking and swimming are good choices. Talk with your doctor about which activities you might try.
- Build muscle strength and flexibility. Abdominal and back muscle exercises, which strengthen your core, help condition these muscles so that they work together like a natural corset for your back. Flexibility in your hips and upper legs aligns your pelvic bones to improve how your back feels. Your doctor or physical therapist can tell you which exercises are right for you.
- Maintain a healthy weight. Being overweight strains back muscles. If you're overweight, trimming down can prevent back pain.

Yogic Asana for managing back pain

Bhujang Asana

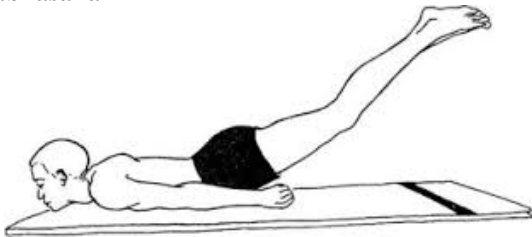




Technique

1. Lie down in prone lying position; Forehead resting on the floor; Arms close to the body and legs together with toes stretching out.
2. Bend arms at elbows and place the palm of the hand with fingers together in line with the shoulders. Elbows should point upward and parallel to each other.
3. Inhale slowly and with the help of the arms slowly raise the trunk upwards. Keep the legs together with heels touching each other. Stretch up to a comfortable level and stretch the neck backward.
4. Breathe normally and hold in this position for one's comfortable time. Slowly exhale and lower the trunk to the floor. Release the arms and keep it by the side of the body and relax.

Shalabhasana



Technique

1. Lie down in prone lying position. Forehead resting on the floor, arms close to the body and legs together with toes stretching out.
2. Make fist with both hands and tuck it inside the thighs. Raise the head and place chin on the mat.
3. Inhale slowly and raise both legs together as high as possible. Breathe normally. Hold in this position for one's comfortable time. Try to keep the legs straight with toes stretched out.
4. Exhale and slowly bring down the legs. Release the tucked fists underneath the thighs and release the chin. Relax in Shavasana or Makrasana for double the time of holding the asana.

Dhanurasana



Technique

1. Lie down in prone lying position. Forehead resting on the floor. Arms close to the body and legs together with toes stretched out.
2. Slowly exhale completely and bend legs at knee and hold the both ankles with respective hands.
3. Lift the lower part and upper part of the body equally up. Let the body rest on the abdomen.
4. Relax the facial muscles. Breathe normally. Stay for your comfortable time.
5. While releasing slowly bring the body down and release ankles and bring them back to the starting position.

Pavanamukta asana



Technique

1. Lie down in supine position with legs together and arms by the side of the body.
2. Slowly bend legs and bring knees closer to chest.
3. Raise the trunk of the body and try to touch your chin inbetween the two knees.
4. Hold in this position for your comfortable time and relax.

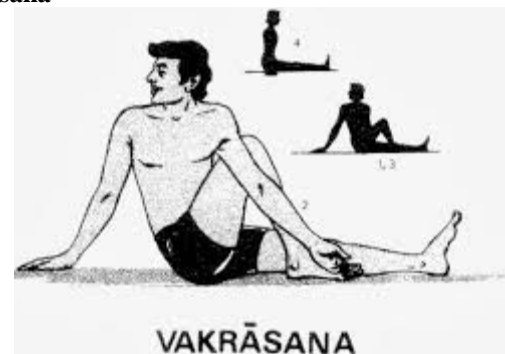
Paschimottanasana



Technique

1. Sit in long sitting position with legs straight.
2. Exhale and slowly lower your trunk towards your legs.
3. Try to hold your big toes with respective hands.
4. Keep the leg straight.
5. Breathe normally and hold for your comfortable time.
6. Relax and come back to the starting posture.

Vakrasana



Technique

1. Sit in long sitting position with legs straight.
2. Bend left leg and keep the feet by the side of right knee.

3. Lift the right arm cross it and place it by the side of right feet.
4. Twist your body and keep the left hand behind the body.
5. Hold for comfortable time, relax and come to starting posture. Repeat to the other side.

Conclusion

Back pain is a common problem and arises out of faulty body mechanics and lack of physical fitness. The problem can be efficiently tackled by following correct body mechanics and doing proper exercise. Yogic asanas are ideal for backache as it provides strength and flexibility gradually and safely.

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