Kyphosis of the Spine

A kyphosis is a forward bend in the spine. Everyone should have a spine which has a kyphosis, or more specifically, a thoracic kyphosis. It is completely normal for the upper part of the spine to bend forwards. However, problems occur if the spine bends forwards too much. Over the course of time, it can become quite excessive, and it's not uncommon to see it in the elderly. Curvature worsening is commonly associated with an increased likelihood of health problems.

This is known as an "increased kyphosis" or hyperkyphosis. One should keep in mind that having a kyphosis is normal, and to not have a kyphosis would be considered abnormal.

There Are a Number of Reasons Why It Happens:

1. **Scheuermann's Disease**
   Although called a disease, it is actually a spinal deformity/dysfunction that causes a forward bending in the upper back. It usually occurs during childhood, especially in early-teenage years.

2. **Hereditary**
   Sometimes an increased kyphosis occurs in families with children sometimes developing the "same spine as their parents".

3. **Poor Posture**
   Years of forward bending can contribute to poor posture which can increase the kyphosis.

4. **Lack of Exercise**
   Sitting all day and not exercising regularly can contribute to an increased kyphosis. This is especially common in people who bend their necks forwards too much, seen in cases where people use laptops a lot.

5. **Degenerative Disc Disease**
   Wear and tear to the discs between the vertebrae can cause thinning of the discs due to dehydration. This may cause a forward bending (kyphosis) in the spine as the spine naturally tries to open up the joints in the back.

6. **Osteoporosis**
   Although less common, an osteoporotic spine can lead to fractures of the vertebrae resulting from the bones being thin. Research has found that about 2/3 of all individuals who have increased kyphosis don't have a spinal fracture.

Kyphosis of the Spine Anatomy

The spine has a natural inward curvature in the lower back and neck known as a lordosis. The opposite of a lordosis is a kyphosis. Kyphosis occurs in the neck when the normal inward curve is reversed, which causes a forward curving of the spine. The ability of the spine to stay in position is largely dependent upon other parts of the spine. All of the vertebral bodies in the spine need to be strong enough to adequately support the head and maintain the normal shape of the spine. Ligaments, facet joints and soft tissues in the back and neck have to be strong. The back muscles have to be capable of resisting the effects of gravity that works to pull the head forward. If any damage is sustained to any of these areas, kyphotic deformities can occur.

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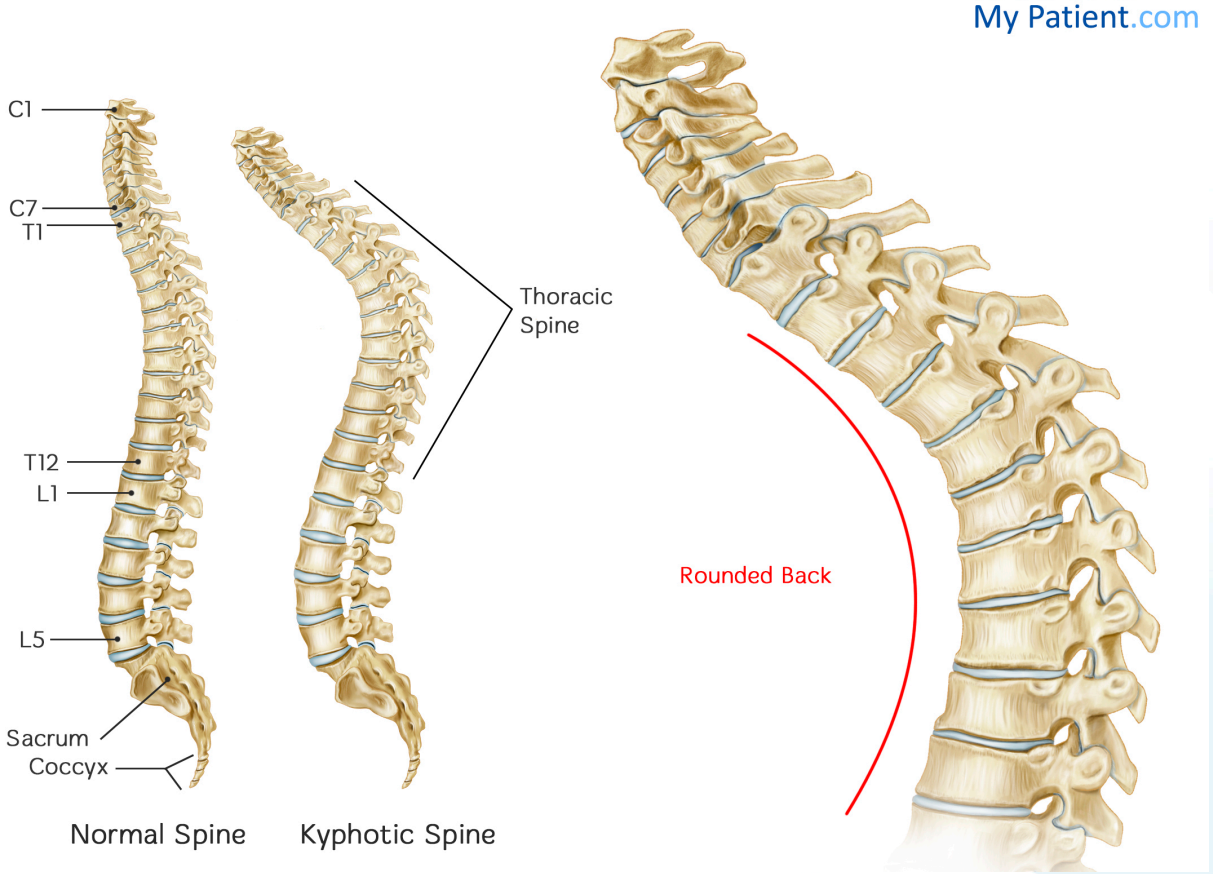

The patient is unable to sit up straight due to severe kyphosis

How to Treat an Increased Kyphosis:

1. **Physical Therapy**
   A physical therapist will help rehabilitate all of the postural changes and limitations that are associated with the condition. The therapist will start by reviewing present and past medical history with you, as well as going through any medications that you currently take. Once any serious problems are eliminated, the therapist can conduct special tests on you to obtain an assessment of your unique condition. They begin by measuring, observing and recording information pertaining to your postural alignment, range of movement, trunk strength and flexibility.
   Occasionally your spinal curve may be measured using a specialized ruler. If you are having trouble keeping your balance and walking, the therapist will observe how you move and perform tests to figure out your difficulty level and whether you are at risk of falling. Various treatment options will be used to help you get where you need to be quickly.

2. **Pilates/Yoga**
   Pilates and yoga can be useful for preventing poor posture associated with an increased kyphosis. Both therapies help with flexibility and muscle strength.

Tips:

- Avoid repetitive forward bending if you do it a lot during the day.
- Keep your posture in an upright position when sneezing or coughing. Avoid bending forward.
- Change the manner in which you get into and out of bed. Rolling onto your side when getting up will help to lessen the progression of your kyphosis. Also avoid sitting up in bed at a 45 degree angle to watch TV or read a book.
- Make any necessary changes in your environment to help support the posture, such as using a supportive chair or back cushion when sitting. Speak with your therapist about any specific recommendations for your condition.
- Avoid exercises requiring a great deal of bending forward, such as crunches, sit-ups and tow-touches.
- Discuss with your therapist about posture correction exercises, or extension exercises.