Osteochondrosis

Osteochondrosis is classified as a group of inflammatory diseases of the short bones and long tubular bones arising from the non-specific or specific infections of the joints and bones.

These diseases typically affect adolescents, and can be caused by the interruption of blood supply to the bone causing osteonecrosis (bone cell death). This affects the ends of the bones known as the epiphysis. The cause is unknown but some believe rapid growth (during puberty) can contribute to the problem. Others believe that it is hereditary, while some therapists believe spinal and body biomechanics play an important role in its development.

One of the most common forms is spinal osteochondrosis, known as Scheuermann's disease. The cause of pain in this condition is changes to the vertebral end plates or an over-flexion of the spine. It is typified by stiffness and forward bending of the spine.

By the time you are 25 years of age, the discs begin degenerating. The decrease of water ends up leading to a decrease in the height of the disc, and hence the space between each vertebra. The disc won't be able to function properly as a shock absorber and the stress in the ligaments is gone. Unwarranted tension occurs with the vertebral joints, which causes the spine to be loaded incorrectly and the segments of the spine become unstable. So this can be when the symptoms really come back to cause problems to the sufferer.

Osteochondrosis Anatomy

The skeletal system is made up of all the joints and bones in the body. All of the bones are a complex group of living organs that are composed of multiple cells, protein fibers and a range of minerals. The skeleton serves as a scaffold by delivering protection and support for the soft tissues that make up the remainder of the body. The system provides a series of attachment points that allow the muscles to move at the joints.

New blood cells are generated by the red bone marrow that is inside of the bones. The bones act as the warehouse for the body's calcium, energy and iron in the form of fat. The skeleton continues growing throughout childhood and serves as a framework for the remainder of the body to continue growing along with it.

How to Treat Osteochondrosis:

Treatment used depends largely upon how severe the symptoms of the disease are. Physical therapy tends to be the starting point for the disease.

1. **Physical Pain Therapy**
   Seeing a therapist is one of the best ways to alleviate the pain and correct the biomechanical problem. Ideally see a therapist with experience treating children. Pediatric physiotherapists typically have experience in this area.

2. **Pharmaceutical Pain Therapy**
   Muscle relaxants can help to alleviate some of the pain in the affected areas and provide you with the ability to move around better than before.

3. **Exercise**
   Exercise is vital for the child. Get them into sport, especially swimming that will reduce the forward bending of the spine and help posture. Reduce the number of hours using smart phones and hand-held computer games, where children are slumped forwards.

4. **Injections**
   If pain is uncontrollable, a consultant might suggest a steroid injection. It's not commonly done however.

5. **Relaxation and Breathing Exercises**
   When posture is slouched, breathing can be sub-optimal. Practice relaxation techniques and breathing exercises as guided by your physical therapist.

6. **Surgery**
   Even though surgery is the last option, there are situations where it is required. When the rectum or bladder becomes paralyzed from a narrowing spinal canal or dropped disc, there is often no other alternative beyond surgery.

Tips:

- Exercises are an important part of the recovery process for those who wish to have a steady remission and bypass any disabilities.
- To prevent the disease from occurring, try to prevent any injury or trauma in the joint that is affected.
- Strengthening exercises is important to building up the muscles and bones in the body.
- Ice the affected area for 5-10 minutes at a time three to five times per day to reduce swelling.
- In the early stages, the condition can correct itself, but there aren't any guarantees.