

ARTHRITIS

Define Arthritis

Artho : Joint

Itis: *Inflammation*

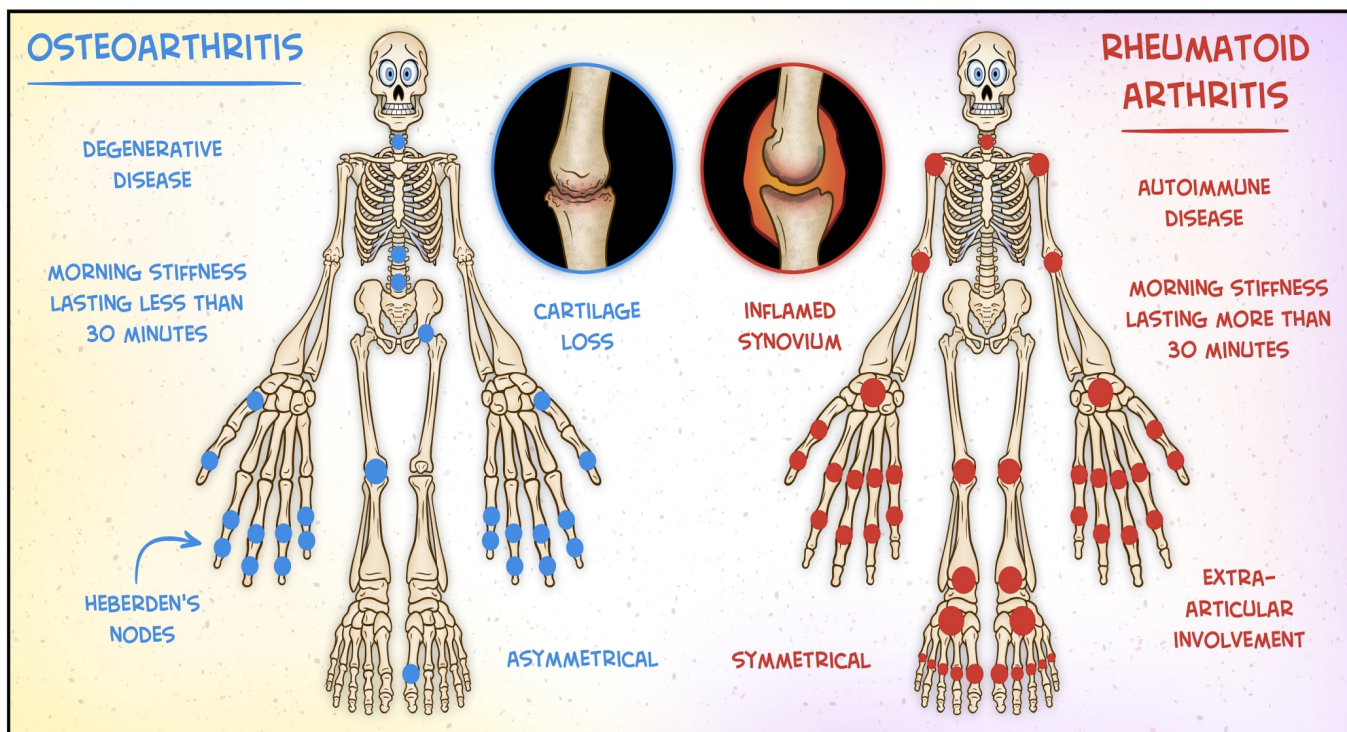
Is a group of over 100 conditions involving damage to the joints of the body. Osteoarthritis is the most common type of arthritis and may be more properly called degenerative joint disease because it doesn't affect the bones until advanced stages of the disease. Osteoarthritis primarily affects cartilage in the joints, causing pain and reduced motion.

In this workshop I will be focusing on the primary form of arthritis, which is Osteoarthritis and Rheumatoid Arthritis. We will review the causes, risk factors, methods of prevention, and the possible treatments obtained through movements.

Our three body systems:

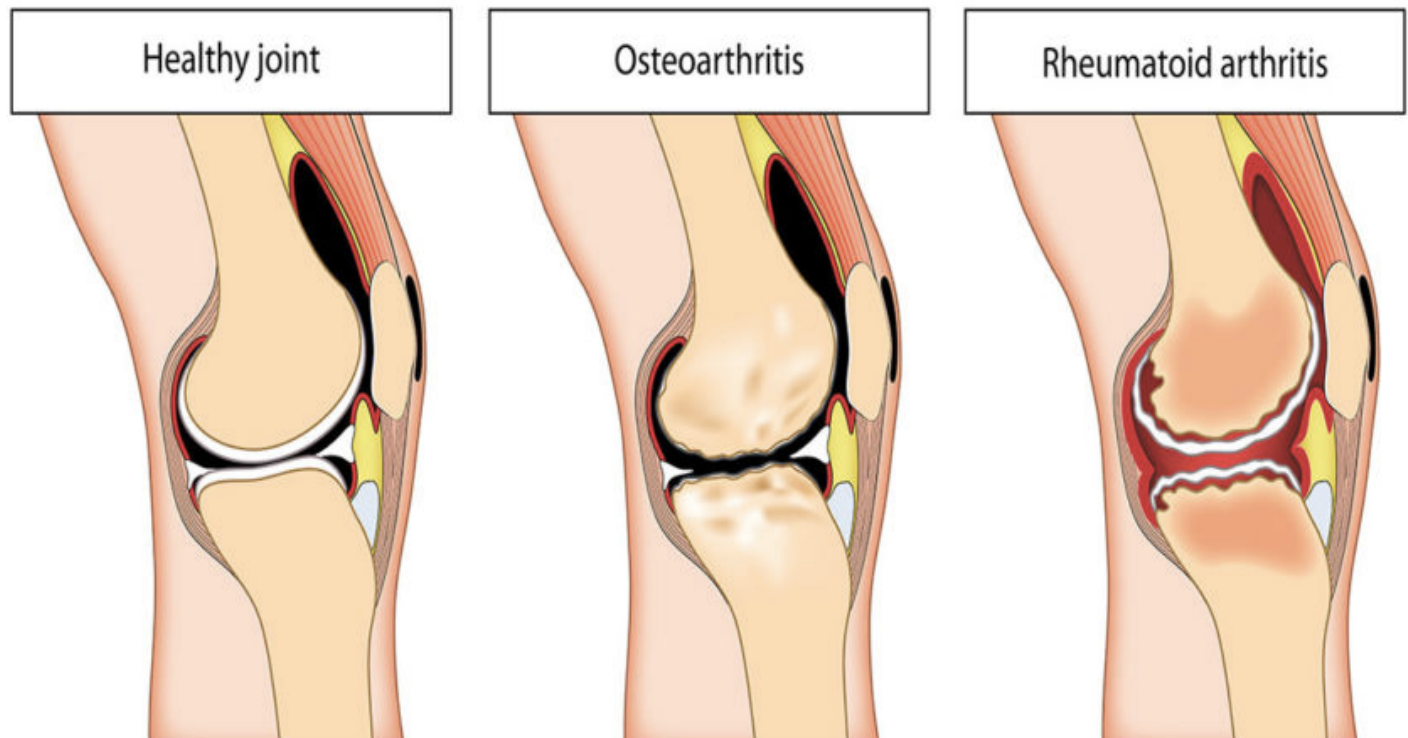
1. **The nervous system:** the body's way of communication between brain and body.
2. **Cardiovascular system:** Blood is being pumped around the body and brings Oxygen to the tissues to keep them healthy and flexible.
3. **Lymph system:** pumps out the waste from the body.

When we move our bodies regularly muscles are contracting and lengthening. This has positive and healthy effect on these three systems. If there is no movement due to joint problem, the muscles can get weaker, there can be less circulation of blood flow, and this can cause pain. By bringing movements to these joints, all these three systems can work effectively to reduce the stiffness, pain, and improve circulation.



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Osteoarthritis

Cause and Risk Factors of Osteoarthritis:

Primary Osteoarthritis referred to as “Wear and Tear” is the most common one. Secondary factor develops as a result of injury or some other medical condition.

Uncontrollable or Genetic Factors:

- Age generally after age of 45
- Gender, more women than men suffer from osteoarthritis. Women joints and bones lose density faster
- Family history genetic
- Disease infection or inflammation
- Joint structure defect

Controllable or lifestyle factors:

- Occupational overuse
- Obesity. Excess body weight increase the stresses on weight bearing joints
- Poor postural stability and balance
- Low muscle tone and strength. Strengthen them by continue motion and movements.

Symptoms of Osteoarthritis:

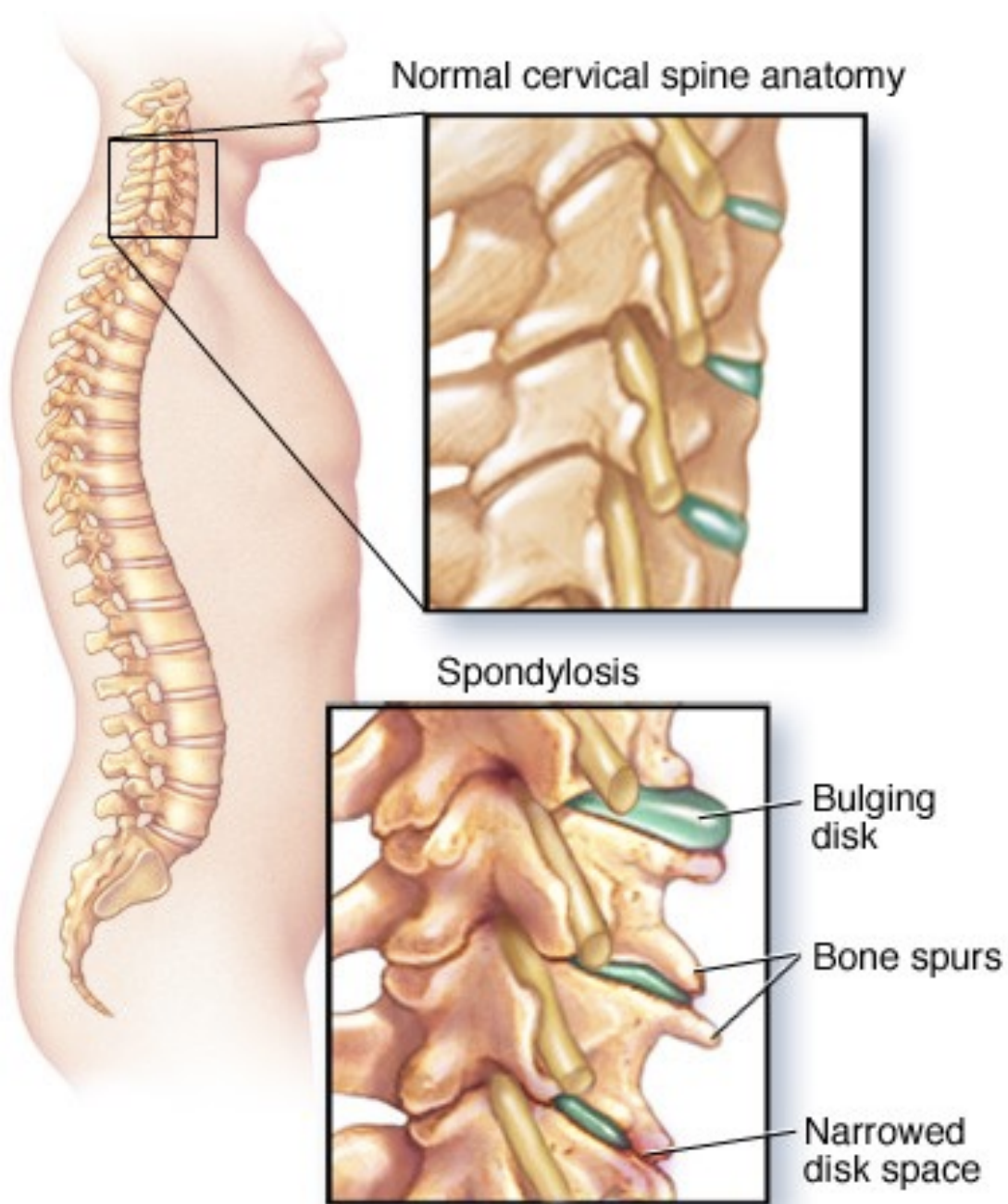
- Progressive localized pain aggravated with weight bearing activities
- Increased pain with weather changes damp, cool rainy.
- Joint stiffness and or loss of range of motion
- Joint deformation resulting in limitation of function
- Grating, crackling or popping sounds
- Stiffness in the morning or after long periods of inactivity
- Instability or giving out sensation; swelling within the effected joint.

How and Where Does Osteoarthritis Occur?

There are more than 100 joints in the body where ligaments connect bones.

The high-risk area's are:

Lower back, hips, knees and feet. Neck and End joints of fingers and the base of he thumb.



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Prevention and management of Osteoarthritis:

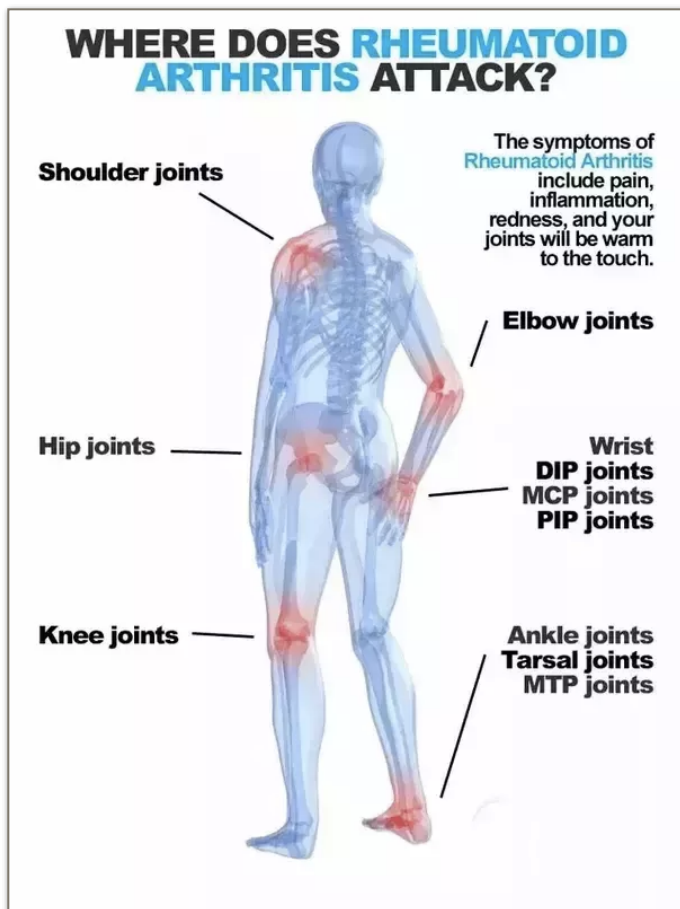
The most significant way is to maintain a healthy body weight. Physical activity is one way to manage weight as well as to strengthen muscles and provide postural support. Movements of the affected joint can have noticeable improvement in terms of long-term pain relief.

Beneficial Exercises: Pilates for Strengthening and gentle yoga, restorative yoga and yin yoga for movements and flexibilities.

The proper exercise for the Neck, Shoulders, Back, Hip, Arms and Legs using movements through Yoga. All movements should be slow and gentle.

Rheumatoid Arthritis

Rheumatoid Arthritis is an autoimmune disease that causes chronic inflammation of the joints. Autoimmune diseases are illnesses that occur when the body is mistakenly attacked by its own immune system. Rheumatoid arthritis can also cause inflammation of the tissue around the joints, as well as in other organs in the body.



Causes or Risk Factors

It is not clear what triggers the onset of rheumatoid arthritis. It may be genetically inherited. Certain genes have been identified that increase the risk for rheumatoid Arthritis.

Uncontrollable or Genetic Factors:

1. Age. Generally after age 20

2. Possible environmental factors. Example: Tobacco exposure and smoking.
3. Chronic periodontal disease may increase the risk

Controllable or lifestyle factors:

1. Occupational overuse
2. Obesity
3. Inflammatory response in the body.
4. Poor postural stability and balance.
5. Low muscle tone and strength.

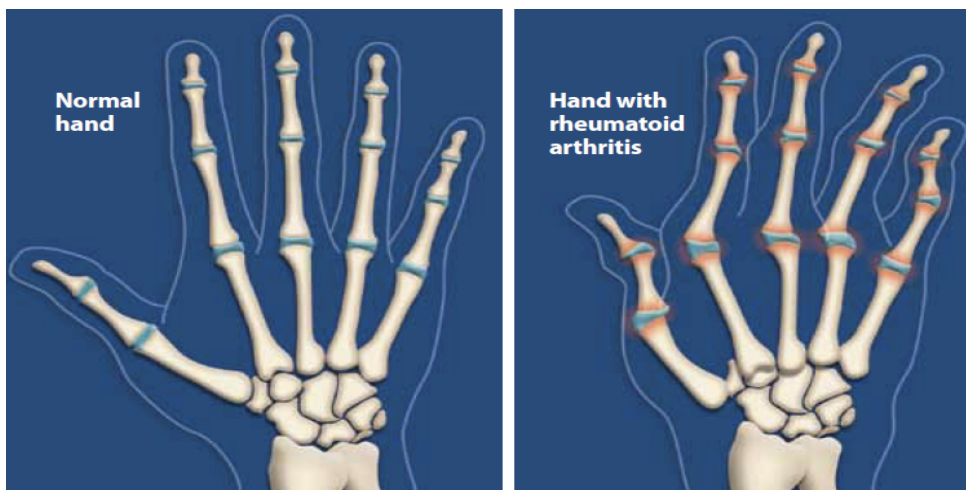
Symptoms of Rheumatoid arthritis:

Symptoms occur when there is a flare up of the disease and this is what causes people to seek diagnosis and treatment. Symptoms during a flare up can include:

- Swelling, joints frequently become red swollen and very painful
- Attacks are not isolated to certain joints but rather include many parts of the body even eyes and lungs.
- Stiffness and swelling usually inflames multiple joints in a symmetrical pattern
- Often affects fingers, wrists, elbows and knees. Muscle and joint stiffness are notable in the morning and after periods of inactivity.
- Feet joints can get affected and walking can be painful.
- General fatigue, loss of appetite, low-grade fever, muscle and joint stiffness.

Appearance in Rheumatoid Arthritis:

Hand deformities of Rheumatoid arthritis are common and appear like joint deformity and swelling. The pain can be significant and medications help reduce the pain.



Treatment for Rheumatoid Arthritis:

There is no known cure for rheumatoid arthritis. To date the goal of treatment is to reduce joint inflammation and pain, maximize joint function, and prevent joint destruction and deformity.

Exercise Choices for benefit and safety with all types of Arthritis

- ❖ **Cardiovascular Fitness:** It increases blood circulation carrying nutrients to muscles and bones. A repetitive movement helps pump synovial fluid in joints increasing lubrication and decreasing stiffness and pain
- ❖ **Recommended:** walking, cross country skiing, swimming or water running, cycling, rowing any activity that increases heart rate to training range for more than five minutes.
- ❖ **Less beneficial:** Tennis, aerobics classes with very fast movements, High impact and high risk activities like heavy weight lifting can increase stress on joints and cause pain.
- ❖ **Focus on Muscular strength:** Strengthening muscles around ankle, knee and hip joints will strengthen bones in the legs and hips. Strong muscles reduce stress on joints. Strong upper body muscles are needed for safely lifting and carrying heavy objects. If using weights, small weights are recommended with slow movements.
- ❖ **Flexibility exercises:** Help and increase the range of motion and function of joints. Through Pilates and yoga movements can achieve this flexibility.
- ❖ **Posture Improvement:** Poor postural habits affect muscle flexibility and balance. Many Yoga and Pilates exercises are repetitive and rhythmic so they produce the pumping of synovial fluid that nourishes cartilages.
- ❖ **Improved breathing:** mechanics through yoga can help relieve the pain.
- ❖ **Mood Improvements:** Depression is common due to the pain, fear and reduce quality of life. Exercise can produce **ENDORPHINS, the body's natural pain relievers and anti depressants.**
- ❖ **Gentle Yoga, Restorative Yoga, Yin Yoga and Pilates:** movements can help the person with Arthritis to be able to do walking, driving getting into and out of bed, tying shoes, picking up objects from floor, removing food from the oven, etc.
- ❖ **Specific exercises for osteoarthritis areas:** should target the muscles supporting those joints. Care should be taken that joints are not overloaded or overstressed at any time.
- ❖ **Progression:** go slowly with your progression. One of the most common causes of injury is increasing the overload too quickly. Progress should be gradual.
- ❖ **Reversibility: USE IT OR LOSE IT!** Benefit gained through exercise is reversible or will be lost this benefit if stopped to exercise.

CAN MOVEMENTS HELP PEOPLE WITH ARTHRITIS? THE ANSWER IS YES!

**KEEP MOVING!!!!!!! BY DOING YOGA AND PILATES WILL HELP EASY THE PAIN.
HERE WHY AND HOW:**

HERE IS WHY yoga poses will benefit the person with the Arthritis:

- ❖ Increase flexibilities and movement
- ❖ Increase Energy Levels
- ❖ Improve respiration through proper breathing
- ❖ Increase focus and balance
- ❖ Reduce Injury and provide more protection
- ❖ Built confidence and self esteem

- ❖ Increase immune system to fight inflammation and pain in body
- ❖ Reduce stress

Recommended exercises and practices for Arthritis.

1. Doing Gentle, Restorative and Yin Yoga.
2. Swimming
3. Water Aerobic for strengthening
4. Shoulders roll
5. Leg Left
6. Resistance band training.
7. Wall Push ups
8. Wrist stretches
9. Walking
10. Knee lift and circle
11. Cycling
12. Doing Tai Chi

HERE IS HOW TO DO THESE Restorative yoga Movement Sequences:

1. Head: Double Chinning, head circle
2. Neck movements and stretches
3. Shoulders. Increase Range Of Motion (tennis ball)
4. Hands and fingers movements.
5. Lower back, bridge movements
6. Hip. Using tennis ball
7. Hamstrings using straps
8. Spine, Cat and cow and bridge
9. Side stretches Banana pose
10. Knees using the foam
11. Ankles.

Other Types of Arthritis

Primary forms of arthritis

1. Osteoarthritis
2. Rheumatoid arthritis
3. Septic arthritis

4. Gout and pseudo-gout
5. Juvenil idiopathic arthritis
6. Still's disese
7. Ankylosing spondylitis

Secondary to other diseases

1. Lupus erythematosus
2. Ehlers-Danlos Syndrome
3. Henoch-Schonlein purpura
4. Psoriatic arthritis
5. Reactive arthritis
6. Hemochromatosis
7. Hepatitis
8. Wegener's granulomatosis and many other vacuities syndromes
9. Lyme disease
10. Familial Mediterranean fever
11. Hyperimmunoglobulinemia D with recurrent fever
12. TNF receptor associated periodic syndrome
13. Inflammatory bowel disease including Crohn's Disease and Ulcerative

Diseases that can mimic arthritis include

1. Hypertophic osteoarthropathy
2. Multiple myeloma
3. Osteoporosis
4. Fifth disease Parvovirus infection

OSTEOARTHRITIS

DEGENERATIVE
DISEASE

MORNING STIFFNESS
LASTING LESS THAN
30 MINUTES

HEBERDEN'S
NODES



CARTILAGE
LOSS

ASYMMETRICAL



INFLAMED
SYNOVIUM

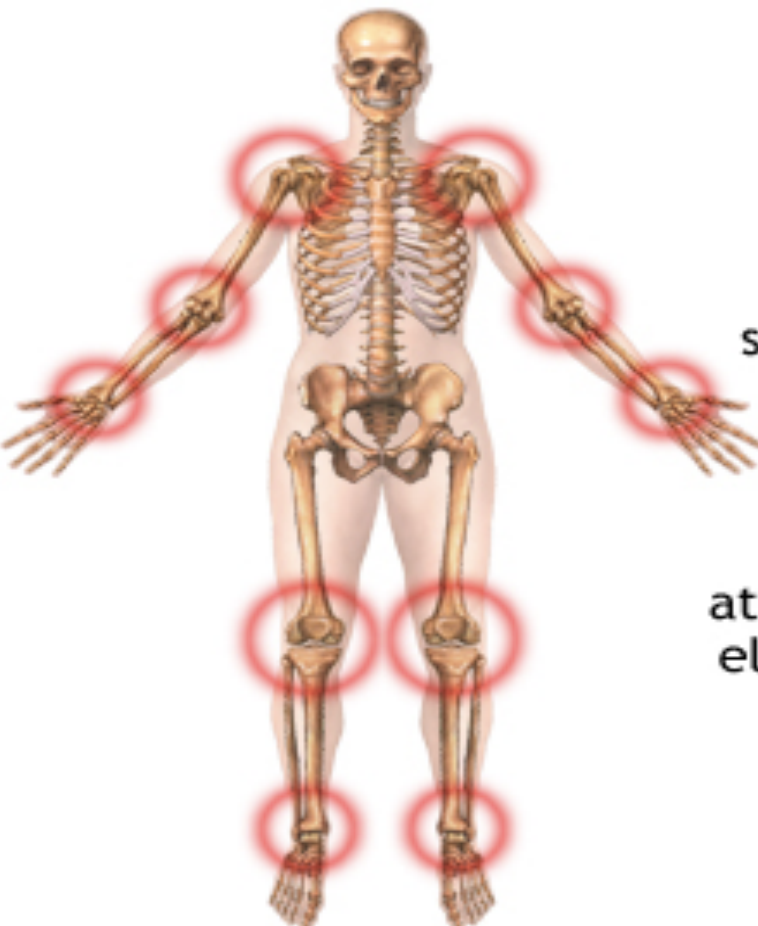
SYMMETRICAL

RHEUMATOID ARTHRITIS

AUTOIMMUNE
DISEASE

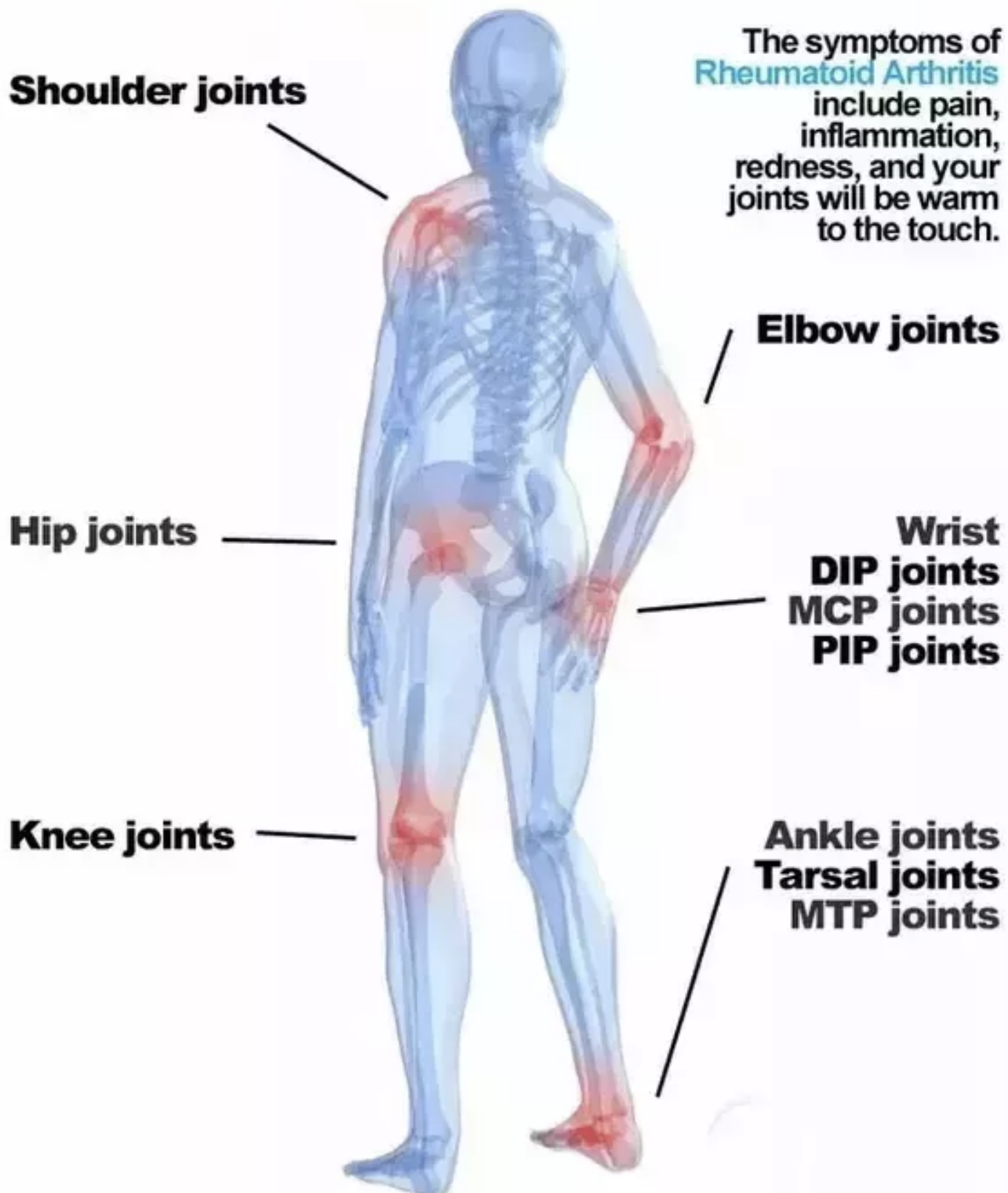
MORNING STIFFNESS
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EXTRA-
ARTICULAR
INVOLVEMENT

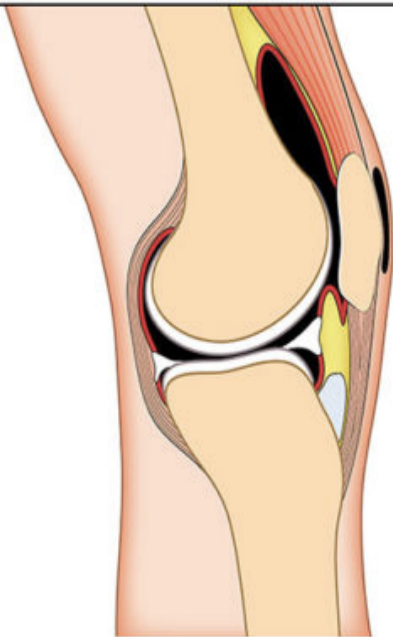


Rheumatoid arthritis usually affects joints symmetrically (on both sides equally), may initially begin in a couple of joints only, and most frequently attacks the wrists, hands, elbows, shoulders, knees and ankles

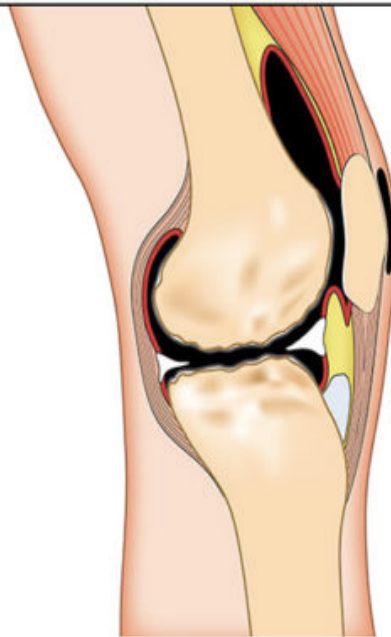
WHERE DOES RHEUMATOID ARTHRITIS ATTACK?



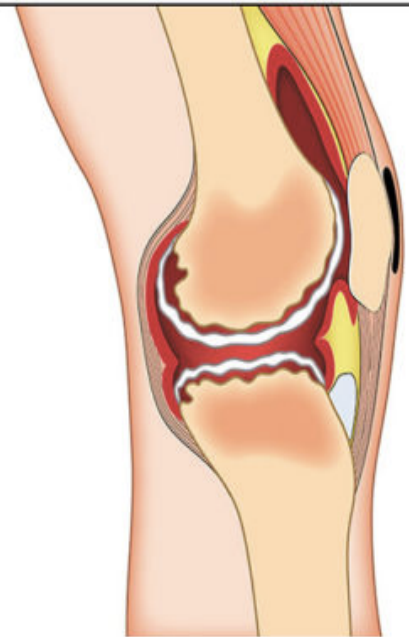
Healthy joint



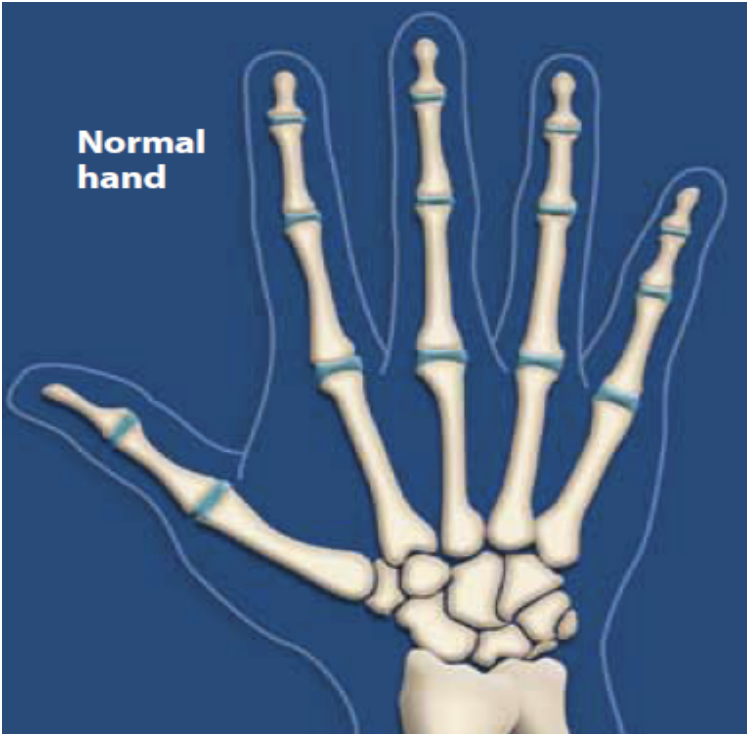
Osteoarthritis



Rheumatoid arthritis



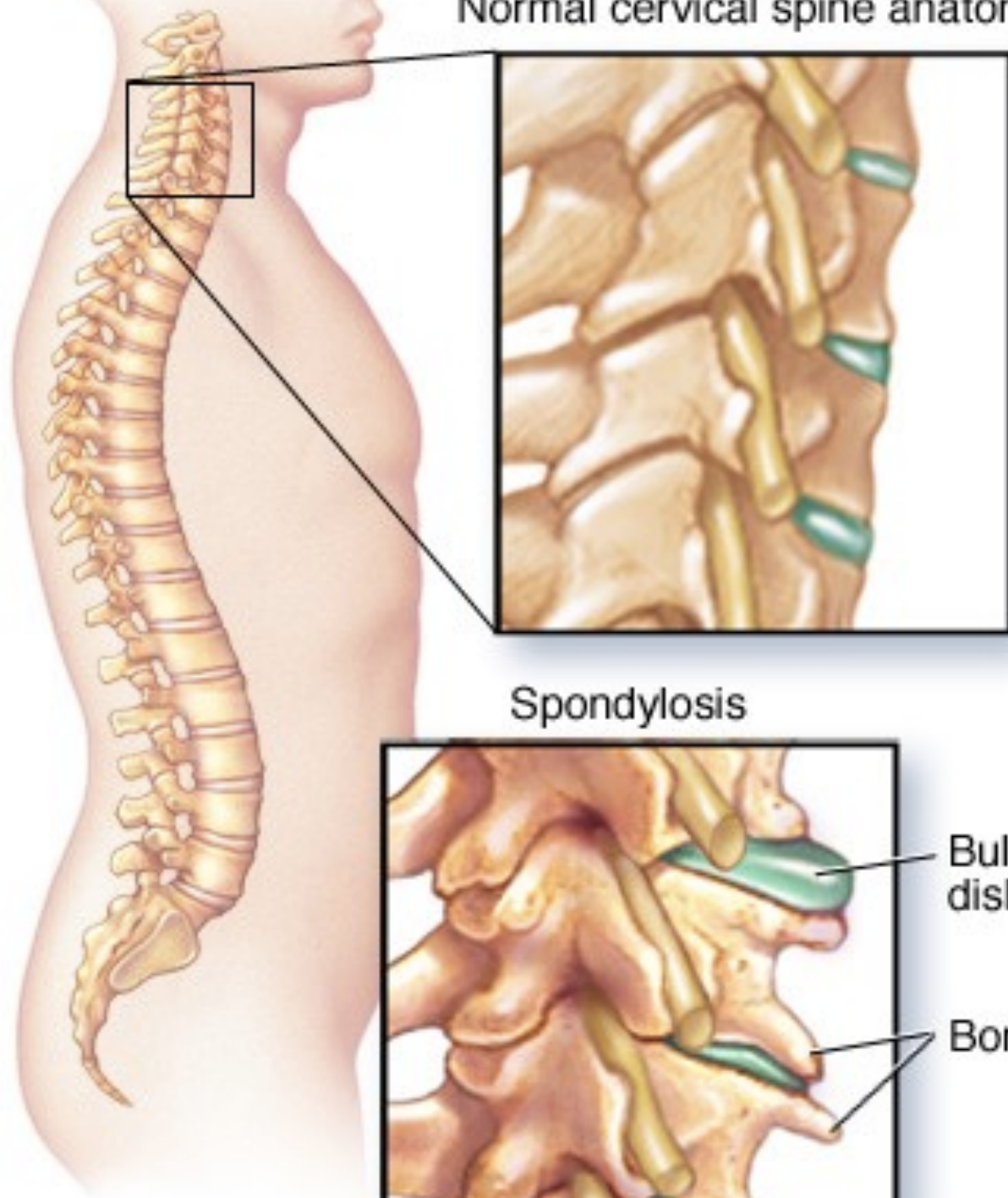
Normal hand



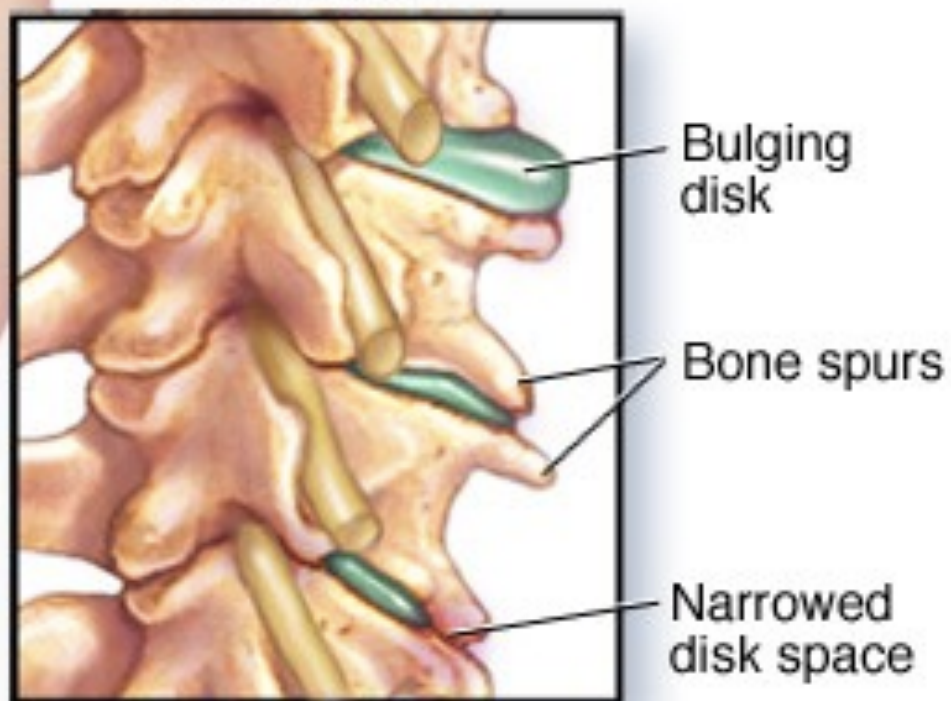
Hand with rheumatoid arthritis



Normal cervical spine anatomy



Spondylosis



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