**Rheumatoid Arthritis Case presentation 1**

JG is a 48-year old married mother.

Seven months ago, JG began noticing stiffness in both hands in the morning that lasted longer and longer. Stiffness now lasted more than 1 hour every morning and included hands, wrists and ankles. She also had increasing difficulty standing for long periods at work or at home due to foot and ankle pain. She began taking ibuprofen 800mg 3 times daily and found it helped her get through her day with less pain and stiffness. Three months ago, JG noticed pain in her right and left shoulders during her work. She also began feeling extremely tired and short tempered. She had no energy to do her usual activities. Ibuprofen was no longer very effective for her pain or stiffness. One morning, Joy could not lift her arms at all without extreme shoulder pain and because of the swelling in her fingers, she had been unable to wear her wedding ring for approximately one year.

She saw her Primary Care Physician (PCP), who examined her and ran a few preliminary blood tests. The blood tests revealed positive rheumatoid factor, cyclic citrullinated peptide (CCP) antibody, elevated ESR and C-reactive protein. JG Primary Care Physician referred her to a Rheumatologist.

Rheumatologist physical examination including all of JG joints, many of which were tender and swollen. At her follow-up visit with the Rheumatologist 2 weeks later, laboratories had confirmed what her history and examination indicated, that Joy had established Rheumatoid Arthritis (symptoms present for more than 6 months). Joy’s shoulders felt a little better, though she was still having pain and difficulty raising her arms. The Rheumatologist recommended she see a Physical Therapist (PT) for further assessment and treatment of her shoulders and advice on activity modification related to her work.

**Objectives:**

1. Explain the possible role of immune system in the pathophysiology of rheumatoid arthritis

2. List the most important cells and cytokines associated with rheumatoid arthritis

3. List the symptoms associated with rheumatoid arthritis.

4. List the extra-articular manifestations of rheumatoid arthritis.

5. List the laboratory tests used in diagnosing rheumatoid arthritis.

**Questions**

1. Discus the possible risk factors

2. Explain the role of T and B lymphocyte in the development of rheumatoid arthritis?

3. What would be the most important cells in the development of rheumatoid arthritis?

4. What are the most important cytokines in the development of rheumatoid arthritis?

5. Discus the most important small joint criteria of rheumatoid arthritis

6. Discus the most important large joint criteria of rheumatoid arthritis

7. What is the most important laboratory changes associated with rheumatoid arthritis