Stages in the development of RA And pathophysiology:

There are 4 stages in the development of RA.

- First stage: The unknown etiological factors initiates joint inflammation or synovitis i.e swelling of synoveal membranes by production of excess synovial fluid.
- Second stage: Pannus (granulation inflammatory disease) is formed at the junction of Synovium & cartilage. This extends over the surface of articular cartilage & involvation of the joint capsule & sub-chondral bone.
- Third stage: Tough fibrous connective tissue replace pannus, occluding the joint space. Fibrous ankylosis, result in used joint motion & deformity.
- Four stage: As fibrous tissue calcifies bony ankylosis may result in total joint immobilization.

Clinical manifestations

- Limited range of motion
- Articular pain
- weight loss
- Fever & fatigue
- Stiffness in early morning.
- Initially pain may be experienced during movement of joints

- Swelling of joints
- Deformities of hands & feet
- Anemia
- Positive felty syndrome (felty syndrome - is characterized by inflammatory eye disorder, splenomegaly, lymphadenopathy, pulmonary dislase)
- Positive sjogren's syndrome - Dry eyes & dry mucous membrane.

Diagnostic Evaluation
- History collection
- physical examination
- Presence of clinical features
- Increased ESR.
- Analysis of synovial fluid
- X-ray
- Lupus cell test.
- Used WBC count
- Biopsy
- Complete blood count (TLC & DLC)

Management

Goals:
- To relieve joint pain
- To correct anemia
- To control inflammatory process
- To prevent complications

Medical Management
- NSAIDs (Aspirin, morphine or opioid analgesics)

corticosteroids (dexamethasone)
- Intra articular injection of corticosteroids
- Immunosuppressive (cytotoxic) agents such as tab. azathioprine.

Surgical management
- Osteotomy (removing the slice of bone to change its alignment, to correct deformity & to relieve pain).
- Synovectomy (excision of the diseased synovial membrane to restore joint movement.
- joint replacement therapy.
- Hip arthroplasty (total hip arthroplasty provides significant relief in pain & improvement in function of joint).

Nsg diagnosis
- Chronic pain & discomfort related to joint deformity & destruction.
- Impaired physical mobility related to pain in joint during activity
- Self care deficit related to swelling pain & deformity in joints
- Depression & anxiety related to disease process.

Nsg management
- Use the splints to rest the painful joints like knee or wrist. It can also be used

to prevent or correct flexion deformities.
- A bed cage & padded foot rest should be providing.
- The mattress for rest should be firm.
- A back rest & minimum no. of pillow should be in position during the day & only one firm pillow should be used during night.
- Foot & quadriceps exercise should be performed daily along & exercise in unaffected limbs.

Complications
- Thrombophlebitis
- Osteoporosis
- Amyloidosis
- Spinal cord compression
- Infection of surrounding organs

SYSTEMIC LUPUS ERYTHMATOUS
SLE is a chronic, inflammatory autoimmune disorder that attacks on the multiorgans of body such as kidney, joint, skin, brain.

Clinical Manifestations
General features
- Low grade fever
- Headaches
- Severe fatigue
- Loss of appetite

Hair loss
Muscle ache
joint swelling
Anemia
chest pain.

joint pain

Specific features
Heart - Arrhythmias
Skin - Change in color, hair loss & thinning, Sun sensitivity, rashes.

GIT - Nausea, vomiting & abd. pain.
Nervous sys - vision problems, seizures.
Kidney - weight gain.

Causes
No exact cause of SLE but some factors play an imp role in SLE causation

- Physical or emotional stress
- prolong exposure to ultraviolet rays
- Viruses
- Inherited genes
- Certain medications
- Trauma.

Diagnostic test
History collection
Physical exam
chest x-ray
Blood tests
Urinalysis