

Arthritis and rheumatic disease

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- Common disease affecting all ages and both sexes
- Joint inflammation causing pain, tenderness, swelling, warm, redness, stiffness and loss of motion in joints and other parts of body such as muscle, tendon, ligament, bone and internal organs

Types of arthritis and rheumatic disease

■ **Osteoarthritis (=degenerative joint ds, wear-and-tear arthritis):-**

- = most common, characterized by cartilage loss, osteophytes and joint space narrowing secondary to aging or following injury.
- often affects knee, hip, finger
- pain that worsen following exercise or immobility

■ Rheumatoid arthritis :-

- = most common, autoimmune disease often affecting women
- mostly affects joints of hand and feet and tends to be symmetrical.
- also affects bones, organs.
- may have fatigue, malaise, fever, weight loss, eye inflammation

- **Fibromyalgia** = chronic disorder causing pain throughout tissues that support and move bones and joints, especially neck, spine, shoulder, hip
- **Gout** = most painful rheumatic disease due to uric acid deposition in connective tissue and joint space between bones.
 - hyperuricemia associated with age, obesity, high-protein diet, high alcohol consumption, hyperlipidemia, diabetes, ischemic heart disease, hypertension, family history
 - commonly affect big toe. Also can affect instep, ankle, heel, knee, wrist, finger, elbow

- **Infectious arthritis** eg. bacteria, virus

- **Reactive arthritis** :-
 - secondary to infection in urinary tract, bowel or other organs
 - often associated with skin rash, mouth sore, eye inflammation

- **Psoriatic arthritis** = occurs in patients with psoriasis affecting joints of fingers and toes causing changes in fingernails and toenails

■ **Systemic lupus erythematosus (SLE) :**

= autoimmune disease affecting skin,
blood vessels, joints and internal organs

■ **Ankylosing spondylitis** = inflammation of
back (unknown etiology) affecting spine,
hip, shoulder, knee

■ **Juvenile rheumatoid arthritis** = most
common type arthritis in children less
than 16 years old, causing pain,
stiffness, swelling and loss of function in
joints. May be associated with fever,
rash, eye inflammation

■ **Polymyalgia rheumatica:**

related to giant cell arteritis affecting tendons, muscle, ligament, tissue around joint, causing pain, aching, morning stiffness in shoulder, hip, neck, lower back

■ **Polymyositis** : causing inflammation and weakness in muscle affecting whole body leading to disability

■ **Bursitis** = inflammation of bursae causing pain and tenderness limiting movement of nearby joints

■ **Tendinitis** = inflammation of tendons causing pain and tenderness limiting movement of nearby joints

Management of arthritis and rheumatic disease

■ General measures:-

- education, avoid physical and emotional stress, apply heat or ice to reduce pain and inflammation, enough rest and exercise, control body weight, diet control etc

■ Drugs:-

- analgesics eg. aspirin, panadol, codeine
- tricyclic antidepressant
- non-steroidal anti-inflammatory drugs (NSAID)
- COX-2 inhibitor
- corticosteroid
- disease-modifying drugs eg.
hydroxychloroquine, gold, D-penicillamine
- immunosuppressive drugs eg. methotrexate,
sulfasalazine, cyclosporine
- tumor-necrosis factor modifier, interleukin
antagonist etc.

■ Nutritional supplement:-

eg. for osteoarthritis:

adenosylmethionine, glucosamine,
chondroitin, vitamins D, C, E, carotene

eg. for SLE : DHEA

■ Relaxation therapy

■ Mobilization therapy

■ Transcutaneous electrical nerve stimulation

- **Occupational therapy**: reduce strain on joints during daily activity
- **Physical therapy**: provide exercise to preserve strength and function of joints
- **Assistive devices** eg. splints or braces
- **Surgery** (if arthritis severe) eg. joint aspiration and washout, joint replacement, joint removal, joint reconstruction etc.