

SNS COLLEGE OF ALLIED HEALTH SCIENCES



SNS Kalvi Nagar, Coimbatore - 35 Affiliated to Dr MGR Medical University, Chennai

COURSE NAME: ORTHOPEDICS

TOPIC: RHEUMATOID ARTHRITIS



Rheumatoid Arthritis



INTRODUCTION

Rheumatoid arthritis is an auto immune disorder In which the immune system identifies the Synovial membrane as "foreign" and begins to attacking it



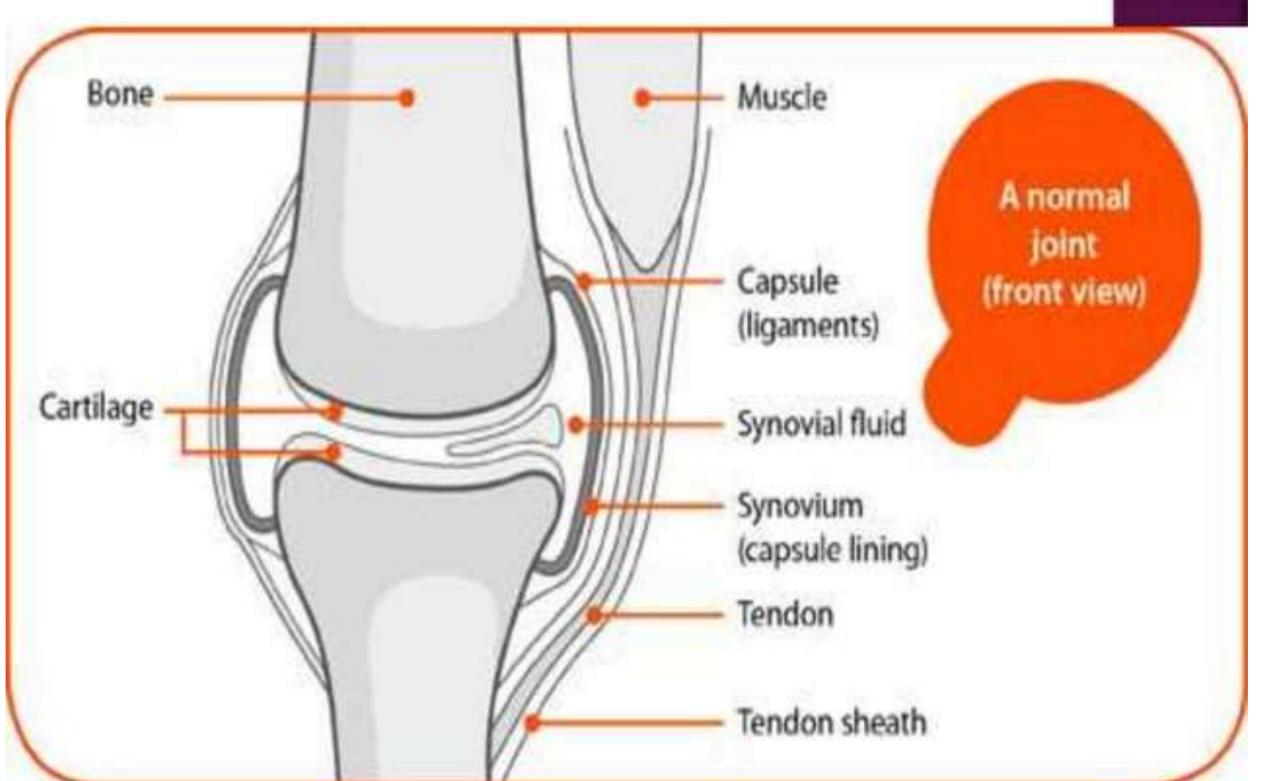


DEFINITION



Rheumatoid arthritis is an chronic inflammatory disorder that may affect many organ and tissue, but mainly attacks the joints Producing an inflammatory Synovitis

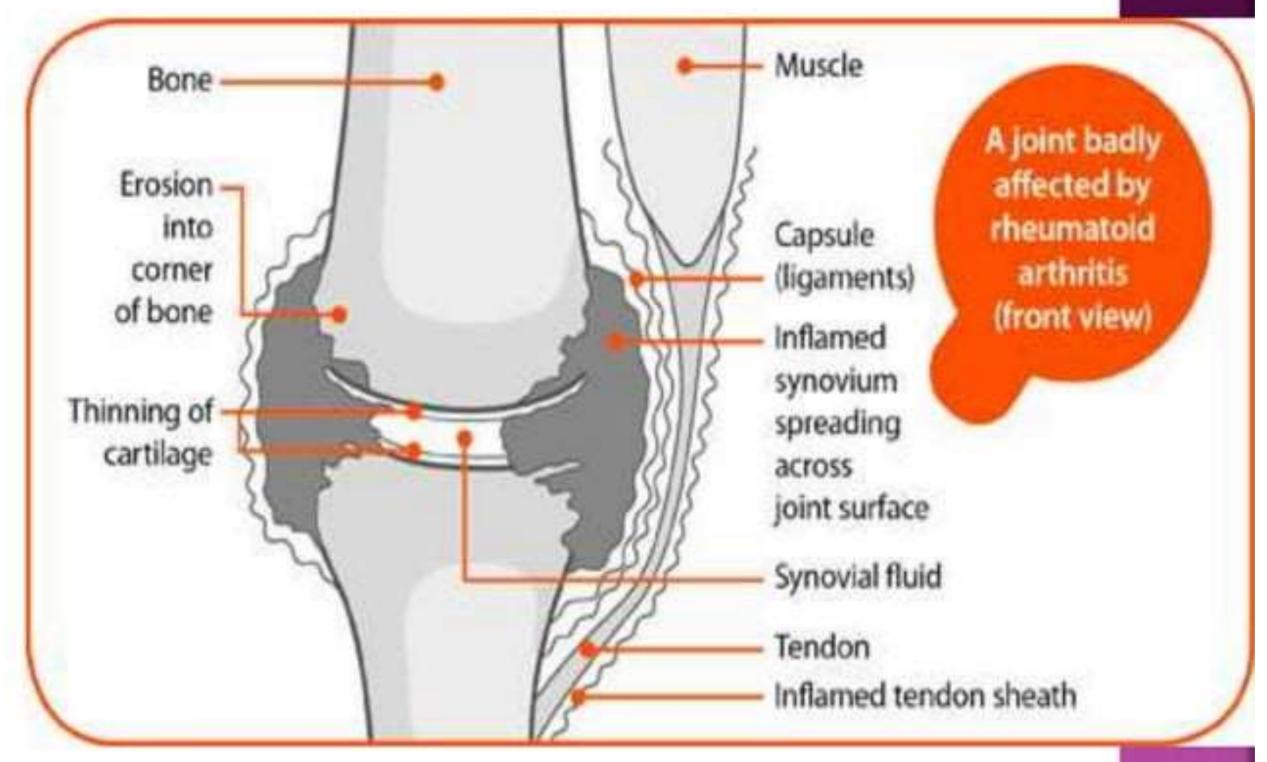














Risk factors



- Idiopathic
- Positive family history
- Smoking
- Bacterial or fungal infection
- Herpes simplex virus infection
- Epstein Barr virus
- Vitamin D deficiency





INCIDENCE

• Approximately 0,5-1% of the adult population and presents two- to three-fold more frequently in women than in men.







Antigen. T lymphocytes (T-cells) binding to antigen and t-cell activation. B cell activation leading to formation of IgM antibody. Antigen-Antibody Reaction. Formation of Immune complex. Release of Inflammatory chemicals (e.g., IL, NF etc) from inflammatory cells, Inflammatory damage to synovial cavity. Destruction (crosion) of cartilage. Inflammation leads to swelling in synovial membrane and pain around joims. RHEUMATOID ARTHRITIS



SIGNS AND SYMPTOMS

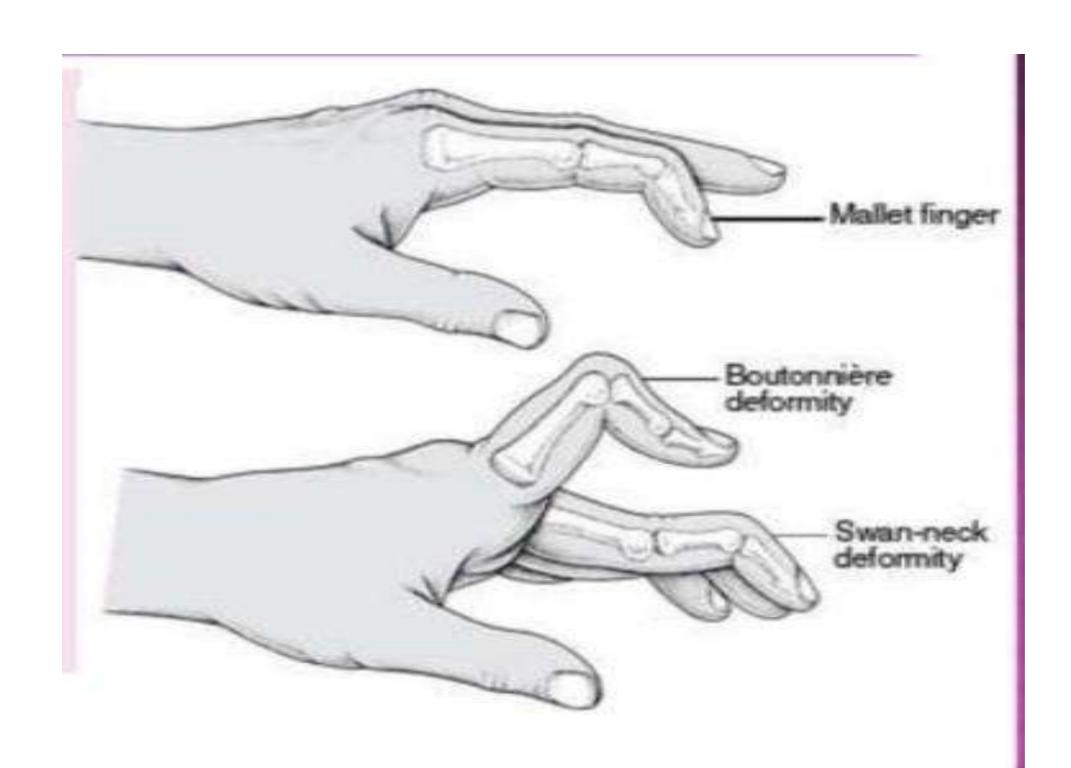


- Pain areas: in the joints, back, or muscles
- Joints: stiffness, swelling, tenderness, or weakness
- Whole body: fatigue, anaemia, or malaise
- Skin: lumps or redness
- Hand: bump on the finger or swelling
- Also common: flare, dry mouth, physical deformity, or sensation of pins and needles



SWAN NECK DEFORMITY

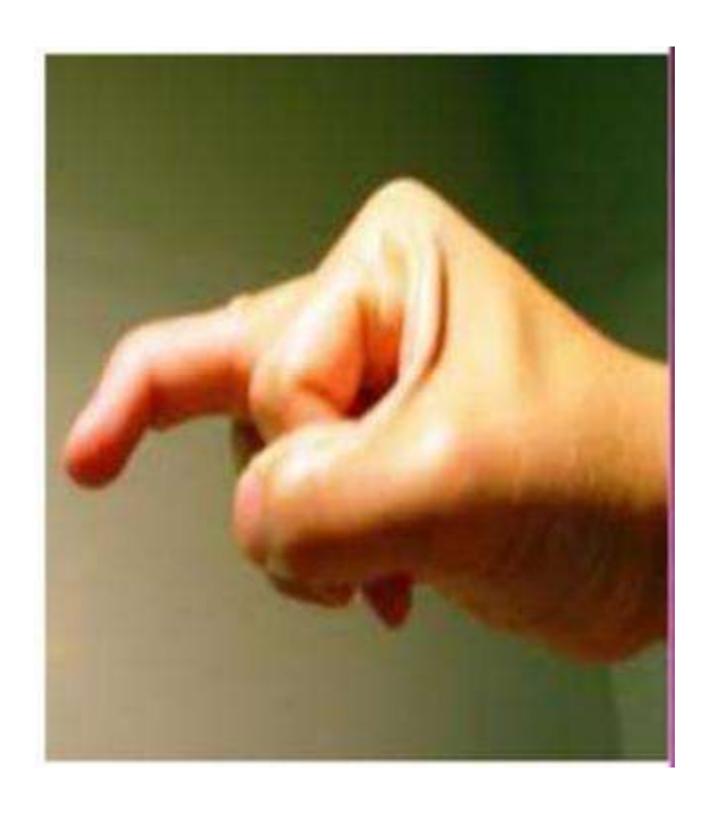






MALLET FINGER

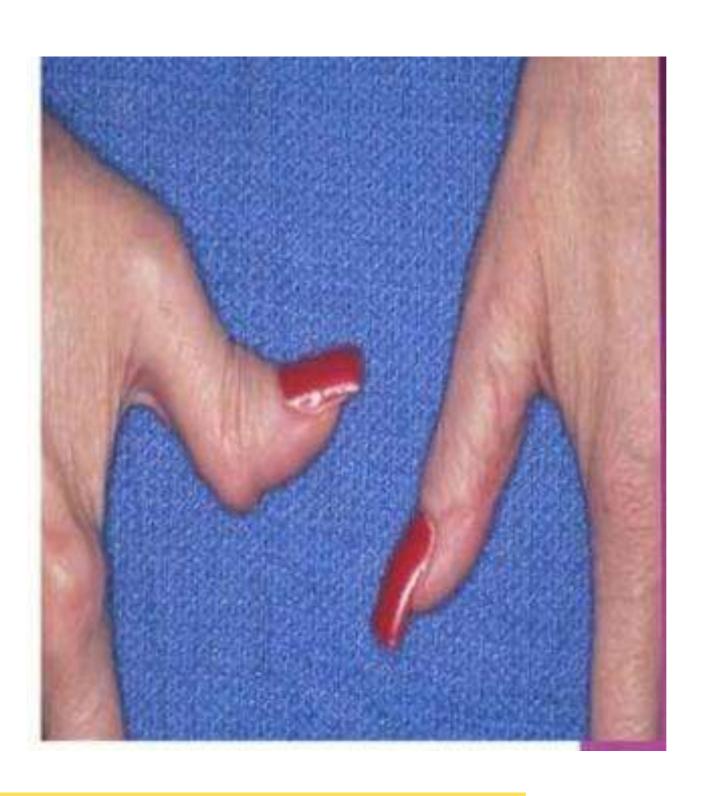






Z _ DEFORMITY OF THUMB







DIAGNOSIS



•BLOOD TESTS:

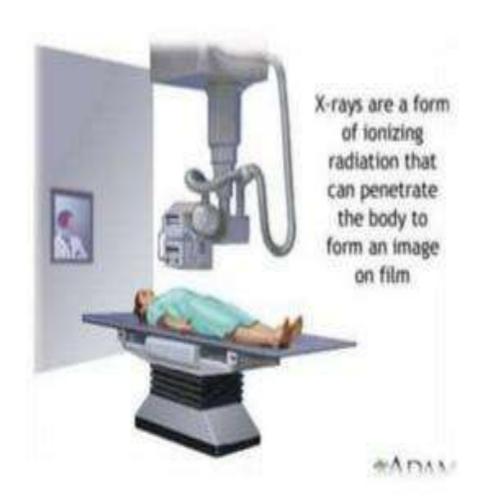
- •erythrocyte sedimentation rate (ESR) which can help assess levels of inflammation in the body
- *C-reactive protein (CRP) another test that can help measure inflammation levels
 *full blood count this test can be used to help rule out other possible causes of symptoms as well as provide an indicator general health

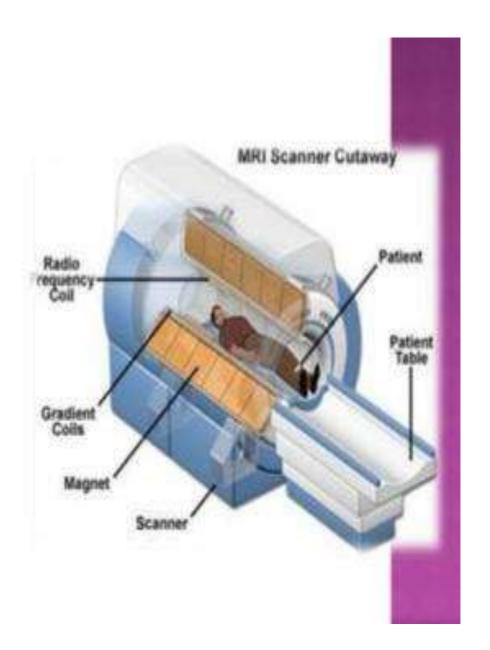


CONT...



X RAYS ULTRASOUNDS MRI







MEDICAL MANAGEMENT



Salicylate Acetylation

Aspirin

Non Acetylated

- choline magnesium
- Trisalicylate
- choline salicylate

CONT...



- Ibuprofen
- Nabumatone
- Etodolac
- Flurbiprofen

Immunosuppressives

ACTION _ Immune suppression, effects DNA Synthesis other cellular effects

Methotrexate

Azathioprine

Cyclophosphamides







• CORTICOSTEROIDS

Action _ Anti inflammatory effects, analgesics , used for Shortest duration And at lowest dose possible To minimize adverse effects

Hydrocortisone
Intra _ articular injection.
Prednisone
TOPICAL ANALGESICS
Capsaicin





SURGICAL MANAGEMENT

Surgeries considered for people who have severe rheumatoid arthritis include:

- Arthroplasty, to replace part or all of a joint, such as the hip or knee.
- Arthroscopy, which uses a small lighted instrument to remove debris or inflamed tissue from a joint.
- Carpal tunnel release, to relieve pressure on the median nerve in the wrist.





ASSESSMENT

- 1. Define Rheumatoid Arthritis?
- 2. What are the pharmacological management for Rheumatoid Arthritis





REFERENCE

Textbook of Orthopedics Author – John Ebnezar Rakesh John





THANK YOU