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FACULTY OF NURSING

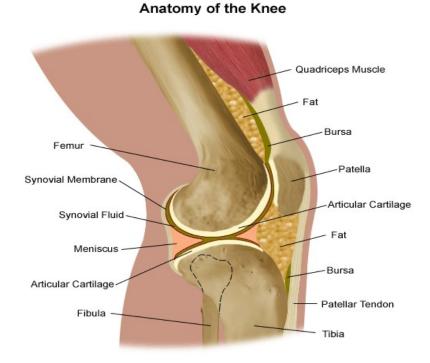


ARTHRITIS

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ARTHRITIS

It refers to the inflammation of a joint. It affects women twice as much as men.



Types

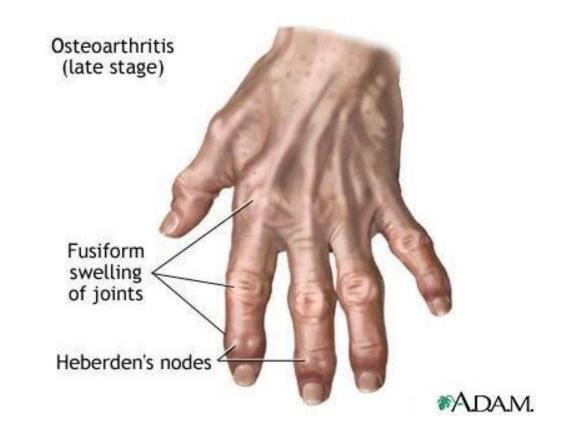
It is off two types

(i) Osteo Arthritis and(ii) Rheumatoid Arthritis



Osteo Arthritis

It is a slowly progressive non inflammatory disorder of synovial joints



Etiology

- Trauma
- Mechanical stress
- Inflammation
- Joint instability
- Neurological disorder
- Skeletal deformities
- Hematologic / Endocrine Disorders
- Use of selected drugs

Pathophysiology

It results from cartilage damage that triggers a metabolic response at the level of chondrocytes. Progression of OA causes normally smooth, white, translucent articular cartilages to become dull, yellow and granular. Affected cartilage gradually become softer, less elastic and less able to resist wear with heavy use.

Cont...

Cartilage and bony growth increase joint margins. The resulting incongruity in joint surfaces creates an uneven distribution of stress across the joint and contributes to a reduction in motion.

Clinical Manifestations

- **Systemic**: fatigue, fever and organ involvement are not present in osteoarthritis
- Local: pain worsens with joint use, early morning stiffness, but generally resolves in 30 min, deformity

Diagnostic Evaluation

History Collection, Physical Examination, CT Scan, MRI, Bone Scan, X ray, Synovial Fluid analysis.

Management

- Rest and joint protection
- Heat or cold applications
- Nutritional therapy & exercises
- Weight reduction programme
- Drug Therapy
 - Acetaminophen
 - NSAIDs
 - Antibiotics
 - Corticosteroids
 - Opioids

Cont...

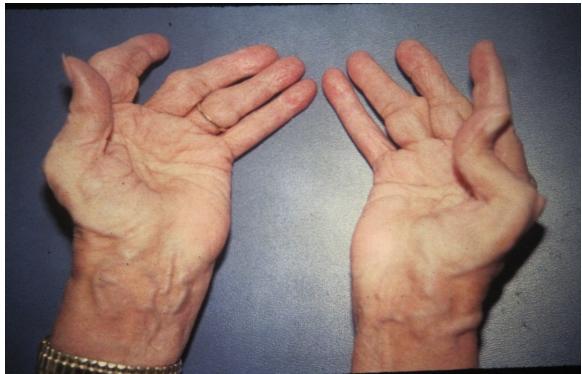
- Reconstructive Joint Surgery
- Complementary and Alternative Therapy
 - Herbs and Nutritional Supplement
 - Movement Therapies
 - TENS
 - Acupuncture

Prevention

- Maintain healthy weight
- Do not sleep in prone position
- Avoid cigarette smoking
- Obtain regular physical activity
- Avoid trauma to joint
- Exercise regularly

RHEUMATOID ARTHRITIS

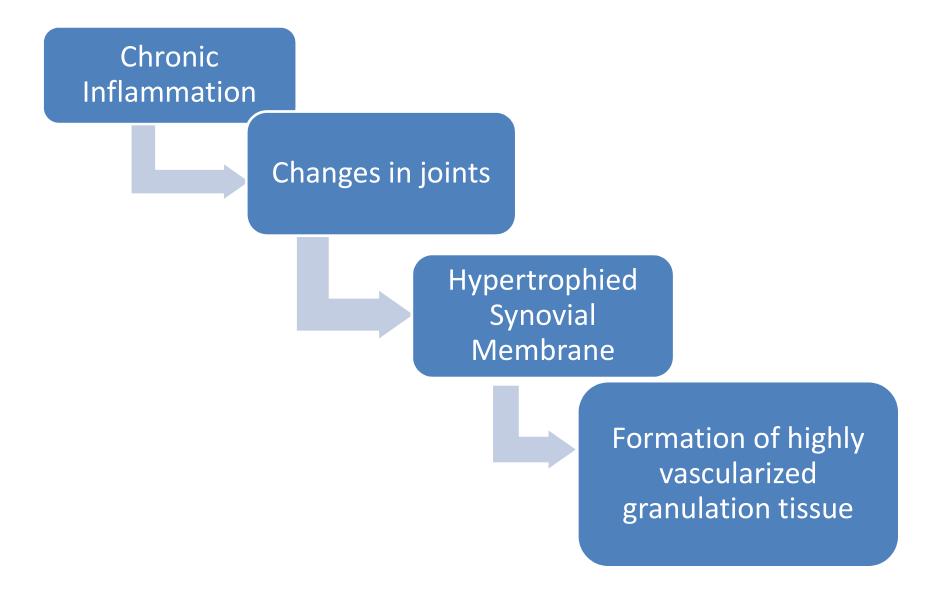
It is a chronic, systemic auto immune disease characterized by inflammation of connective tissue in the synovial joint.



Etiology

Unknown or Auto Immune Response

Pathophysiology



Cont... Covers and erodes the entire surface **Production of** inflammatory cytokine Cartilage destruction Joint laxity, subluxation

Clinical Manifestations

Non Specific Manifestations: fatigue, anorexia, weight loss, generalized weakness may precede the onset of arthritic complaints.

The stiffness becomes more localized in the following weeks to months.

Cont...

Specific articular involvement is manifested clinically by pain, stiffness, limitation of motion and signs of inflammation. Later joints became tender, painful and warm to touch.

As disease gets progress, inflammation and fibrosis of the joint capsule and supporting structures may lead to deformity and disability.

Stages of RA

Early RA

Intermediate RA

Late RA



Complications

- Flexion contractures
- Nodular Myositis
- Cataract
- Loss of vision
- Pleurisy
- Pleural effusion
- Pericarditis
- Pericardial effusion
- cardiomyopathy

Diagnostic Evaluation

Positive RF occurs, ESR and C- reactive protein, ANA titer, Synovial Fluid Analysis, Elevated WBC – upto 25000 μ/l , Tissue Biopsy

Management

- Drug Therapy
 - Salicylates Aspirin, choline salicylate
 - NSAIDs Ibuprofen, Ketoprofen, Diclofenac
 - Antibiotics Doxycycline, Monocycline
 - Topical Analgesics capsaicin cream
 - Corticosteroids Methyl Prednisolone Acetate, Hydrocortisone
 - Anti Rheumatic Methotrexate, Penicillamine
 - Immuno-suppressants Azothioprine,
 Cyclophosphamide

Cont...

- Nutrition and Weight management
- Exercise
- Rest and joint protection
- Heat and Cold Applications
- Reconstructive Surgery
- Arthroplasty
- Implants