

Normal Joints vs RA Joints

Normal Joints	RA Joints
Normal, thin synovium surrounding joint space	Synovial thickening, leading to panes formation
Intact tendons and ligaments	Loosening of tendon sheath and other periarticular structures, leading to joint deformities
Well-defined joint space	Joint space narrowing
Smooth, intact cartilage surfaces providing protection to bone	Erosion of articular surfaces, leading t bone erosion and osteoporosis

Overview of RA

Definition

Complex systemic inflammatory condition manifesting initially as symmetric swollen and tender joints of the hands and/or feet

RA effects ~1% of the worlds population

RA arises from an immunologic reaction

May be in response to genetic or infectious antigen

Managing established RA

Risk factors

Female gender (3:1 female to males)

Increasing age (peak onset 35-50 years of age)

Current tobacco smoking

Family history of RA

Potential environmental exposures

Drugs - oral contraceptive use, high ingestion of vitamin D

Managing Early RA

Biologic DMARDs

Non-biologic DMARDs

Comorbidities & Impact on Morbidity/Mortality

Cardiovascular disease

1/2 of RA deaths are cardiac in nature

Inflammation happens in places other than joints, including blood vessels

Infections

RA leads to changes in cellular immunity and increases in infection risk

Comorbidities & Impact on Morbidity/Mortality (cont)

Malignancy

Patients with RA have increase risk of cancer

Lymphoma, leukemia, multiple myeloma

Osteoporosis

RA causes increase in osteoclastic activity

Leads to bone loss

