

Beebe Healthcare
Margaret H. Rollins School of Nursing
N101 – Foundations of Nursing

	OA	RA
Patho	Gradual loss of articular cartilage → Formation of osteophytes @ joint margins → Not normal part of aging process → Cartilage destruction <ul style="list-style-type: none"> - Early-Stage: Pain & stiffness; Inflammation & thickening of capsule & synovium cause - Late-Stage: Increasing pain; uneven wt. distribution, bones rub together Characteristics: Slowly progressive (degenerative), noninflammatory, non-systemic, & more common in women	Chronic , systemic <i>autoimmune</i> disease characterized by <i>inflammation</i> of connective tissue in synovial joints <ul style="list-style-type: none"> - Periods of remission & exacerbation - Autoantibodies develop against the abnormal IgG Continued inflammation → Joint changes (Pannus) → Highly vascular inflammatory tissue → Erodes the articular cartilage → Pannus scars & shortens → Tendons & ligaments
Risk Factors	Age: Old age Decreased estrogen @ menopause (Post-menopausal) Obesity Frequent kneeling and stooping Smoking (tobacco)	Exact cause unknown <ul style="list-style-type: none"> - Increased risk with genetic factors - Women are more likely to develop RA - Age - Smoking/ Exposure to toxins - Hormonal factors - Poor diet - Other autoimmune diseases
S&S	Deformity: <ul style="list-style-type: none"> - Heberden's nodes: Bone growth on DIP joint - Bouchard's nodes: Bony bumps on the middle joints of fingers - Varus: Bow-legged - Valgus: Knock-kneed - Flexion deformity 	Joint stiffness after inactivity morning stiffness, pain increased with motion, spindle finger shape in early disease Onset: Subtle <ul style="list-style-type: none"> - Often affects small joints (PIP, MCP, MTP) - Occur symmetrically Extraarticular S/S <ul style="list-style-type: none"> - Rheumatoid nodules: Painless, subq nodules - Sjogren Syndrome: Damage to tear-producing glands - Felty Syndrome: Enlarged spleen, low WBCs, increased risk of infection
Dx	Bone scan, CT scan, MRI: Shows early joint changes X-rays: detect joint space narrowing, increased bone density, & osteophytes <ul style="list-style-type: none"> - No specific lab tests or biomarkers 	Criteria for Dx: Joint involvement, serology, acute phase reactants, duration of Sx's (+) RF Titer may rise during active disease (Anti-CCP, ANA, ESR, CRP) Synovial fluid analysis Tissue biopsy to confirm early inflammatory changes X-Rays alone are NOT diagnostic of RA
Tx	No Cure <ul style="list-style-type: none"> - Manage pain & inflammation - Prevent disability - Maintain & improve joint function Education Drug therapy: Topical, oral, or intraarticular agents	Drug Therapy: Depends on disease activity, level of function, & lifestyle <ul style="list-style-type: none"> - DMARDs: Methotrexate- Early Tx, lower toxicity but need to monitor CBC & blood chemistry - Biologic Response Modifiers (BMRs): Etanercept/ Embrel, Infliximab/ Remicade, Adalimumab/ Humira - During disease flare-ups: Corticosteroids, intraarticular injections

	<ul style="list-style-type: none"> - NSAIDs, Celebrex, DMOADs, Diclofenac gel, Salicylates <p>Surgery: Considered for loss of joint function, unmanaged pain, & increased dependence in ADLs</p> <p>Psychosocial & physical support</p>	<p>Surgical Therapy: Relieve severe pain. improve function of severely deformed joints</p> <ul style="list-style-type: none"> - Synovectomy, Arthroplasty
NI	<p>Promote activity & independence, utilize joint protective measures</p> <p>Ice Application: Reduce swelling during acute inflammation</p> <ul style="list-style-type: none"> - Heat useful for stiffness <p>Exercises: ROM, muscle strengthening around affected joint, balance exercises</p> <p>Medication administration (Topical, oral, or intraarticular agents)</p>	<p>Acute Interventions: Reduce inflammation, manage pain, maintain joint function, prevent or correct joint deformity</p> <p>Nutritional Therapy: Balanced nutrition, encourage wt. loss, exercise to reduce stress on joints</p> <p>Ambulatory Care: Rest, education, lightweight splints, skin care, ROM Psychological support</p> <p>Gerontologic Considerations: More sensitive to drug effects, polypharmacy, increased risk of pathologic fractures</p>