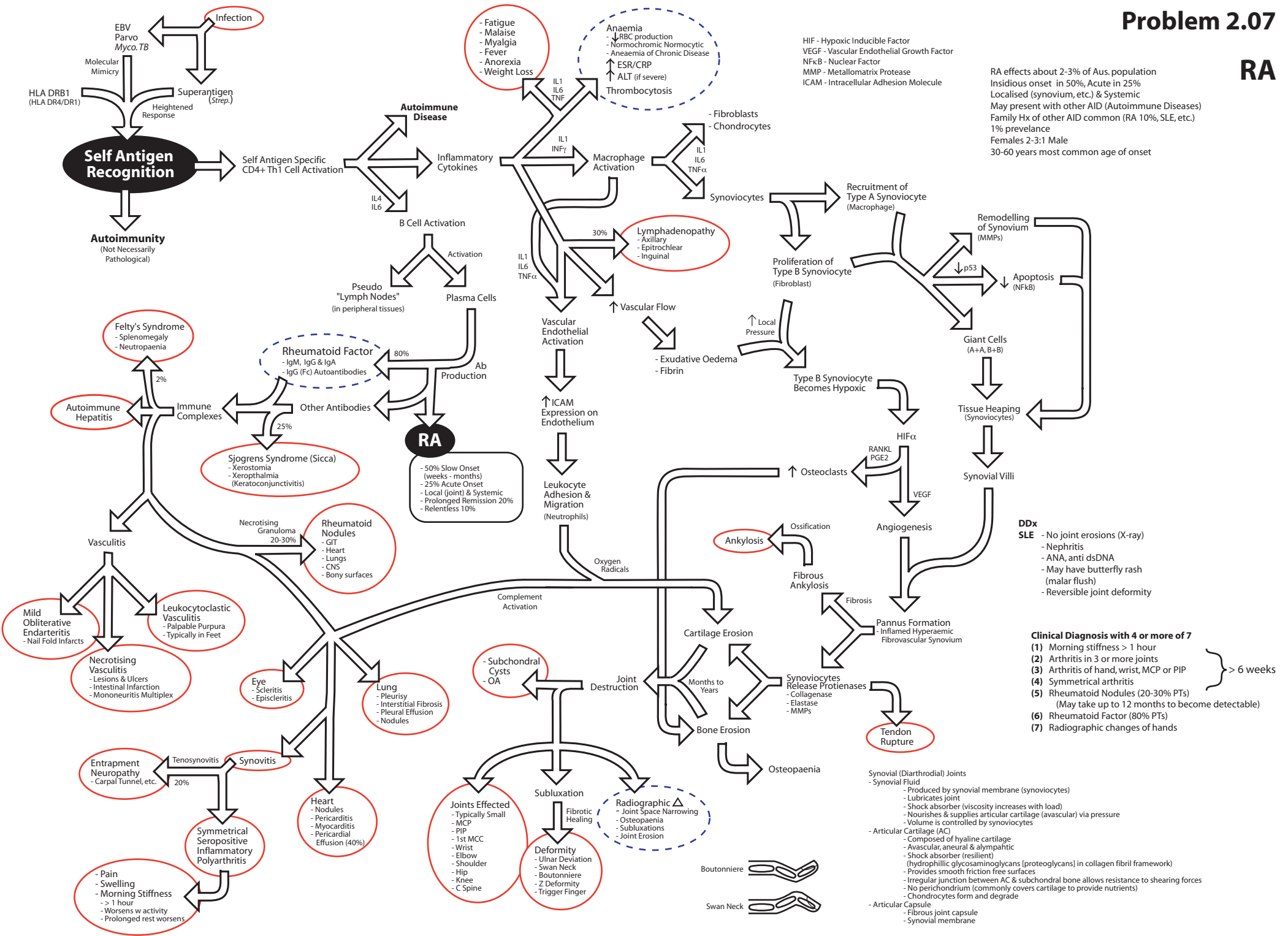


Problem 2.07

RA



HIF - Hypoxic Inducible Factor
 VEGF - Vascular Endothelial Growth Factor
 NFkB - Nuclear Factor
 MMP - Metalloproteinase
 ICAM - Intracellular Adhesion Molecule

RA effects about 2-3% of Aus. population
 Insidious onset in 50%, Acute in 25%
 Localised (synovium, etc.) & Systemic
 May present with other AID (Autoimmune Diseases)
 Family Hx of other AID common (RA 10%, SLE, etc.)
 1% prevalence
 Females 2-3:1 Male
 30-60 years most common age of onset

DDx SLE

- No joint erosions (X-ray)
- Nephritis
- ANA, anti dsDNA
- May have butterfly rash (malar flush)
- Reversible joint deformity

Clinical Diagnosis with 4 or more of 7

- (1) Morning stiffness > 1 hour
- (2) Arthritis in 3 or more joints
- (3) Arthritis of hand, wrist, MCP or PIP
- (4) Symmetrical arthritis
- (5) Rheumatoid Nodules (20-30% PTs) (May take up to 12 months to become detectable)
- (6) Rheumatoid Factor (80% PTs)
- (7) Radiographic changes of hands

> 6 weeks

Synovial (Diarthrodial) Joints

- Synovial Fluid
 - Produced by synovial membrane (synoviocytes)
 - Lubricates joint
 - Shock absorber (viscosity increases with load)
 - Nourishes & supplies articular cartilage (avasular) via pressure
 - Volume is controlled by synoviocytes
- Articular Cartilage (AC)
 - Composed of hyaline cartilage
 - Avascular, aneural & alymphatic
 - Shock absorber (resilient) (hydrophilic glycosaminoglycans (proteoglycans) in collagen fibril framework)
 - Provides smooth friction free surfaces
 - Irregular junction between AC & subchondral bone allows resistance to shearing forces
 - No perichondrium (commonly covers cartilage to provide nutrients)
 - Chondrocytes form and degrade
- Articular Capsule
 - Fibrous joint capsule
 - Synovial membrane

