



OPZ250 Mesleki Yabancı Dil I

4.hafta



Reference Review And Discussion  
On Prostheses

&

Connective Tissue Disease: Juvenile  
Rheumatologic Arthritis

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# Reference Review And Discussion On Prostheses



## Connective Tissue Disease: Juvenile Rheumatologic Arthritis

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### *Description*

limitation in range of motion (ROM) Juvenile rheumatoid arthritis (JRA), also called juvenile – tenderness or pain with ROM idiopathic arthritis (JIA), is a group of diseases of – warmth unknown etiology which manifest as chronic joint ■ \_Present for at least 6 weeks inflammation.

### *Etiology/Types*

The cause, though unknown, is felt to be environmentally triggered in a genetically primed host

*JRA subtypes are as given below:*

- Pauciarticular
- Polyarticular
- Systemic onset

## *Epidemiology*

- Prevalence in the United States is 10 cases per 100,000 children but variable by study location (prevalence range 11–83/100,000)
- Pauci/polyarticular disease more common in girls
- Systemic onset equal in both sexes
- Occurs more frequently in certain populations, particularly in Native Americans
- Age variables are as given below:
  - pauciarticular: early childhood
  - systemic onset: early childhood through adolescence

## *Pathogenesis*

- Unknown trigger
- Chronic synovial inflammation with B lymphocytes
- Macrophage and T lymphocyte invasion and cytokine release with further synovial proliferation
- Pannus (thickened synovium) leads to joint destruction

## *Risk Factors*

- Genetic predisposition
- Family history of other autoimmune disease, including thyroiditis and diabetes

## *Clinical Features*

- Evidence of joint inflammation as noted by the following factors:
  - swelling or effusion
  - limitation in range of motion (ROM)
  - tenderness or pain with ROM
  - warmth
- Present for at least 6 weeks
- Onset before age 16 years
- Onset type within the first 6 months:
  - pauciarticular: four or fewer joints
  - polyarticular: five or more joints
  - systemic onset: fever, rash, arthritis/arthralgias

## *Natural History*

- Variable by onset type
- Onset insidious or abrupt
- Morning stiffness/limping
- Arthralgias
- Constitutional symptoms:
  - fever
  - weight loss
  - fatigue
- Decline in activity level
- Weakness/secondary muscle atrophy
- Loss of joint movement with persistent disease

## *Diagnosis*

### *Differential diagnosis*

- Trauma or orthopedic injury
- Infections with preceding illness
- Travel/exposure in Lyme disease
- Diarrhea/gastrointestinal symptoms in inflammatory bowel disease
- Weight loss/anorexia/fatigue in acute lymphocytic anemia

### *History*

- Decreased activity level, especially in the morning
- Fatigue
- Fever
- Rash
- Joint swelling, warmth

### *Pitfalls*

- \_ Unusual presentation of monoarticular arthritis is a sign of possible infectious etiology or early hip arthritis in possible spondyloarthropathy

### Red Flags

- \_ Nonarticular complaints:

- visual changes—iritidocyclitis
- chest pain/shortness of breath—pericarditis

- \_ ANA+ greater risk of eye disease

- \_ High titer ANA:

– disease evolution to another rheumatologic disease, including systemic lupus erythematosus

## *Treatment*

### *Medical*

- \_Lab studies support the diagnosis, and help with prognosis and disease management
- \_Nonsteroidal anti-inflammatory medication
- \_Corticosteroids
- \_Disease-modifying antirheumatic drugs such as methotrexate
- \_Biologic drugs, including etanercept (blocks tumor necrotic factor, thereby minimizing inflammation)

### *Exercises*

- \_General strengthening, endurance, and fitness
- \_Maintain ROM and flexibility

### *Modalities*

- \_Heat
- \_Cold
- \_Orthoses

### *Injection*

- \_ Selective pain control, treatment for focal joint disability with corticosteroids 17

### *Surgical*

- \_ Joint replacement

### *Consults*

- \_ Orthopedic surgery
- \_ Rheumatology
- \_ Orthotist
- \_ Ophthalmology
- \_ Cardiology

### *Prognosis*

- \_ Seldom life threatening, with mortality less than 1%
- \_ From pericarditis or infection/immune suppression
- \_ Persistent and/or additive arthritis associated with poor functional outcome
- \_ Early wrist and later hip disease, especially symmetrical, associated with poor functional outcome
- \_ RF+ a marker of persistent/life long, aggressive disease
- \_ Presence of ANA+ status associated with eye disease risk