

2001 GPSO MEETING

Wednesday, November 7, 2001, Philadelphia

The Greater Philadelphia Society of Orthodontists Presents:

**"Appearance driven diagnosis and treatment planning."
David M. Sarver, D.M.D., M.S.**

Outline

Localized Etiologic Agents

- Osteoarthritis-Degenerative joint disease
- Abnormal functional load
- Trauma
- Internal derangement
- Avascular necrosis?

Condylar Resorption-Systemic Etiologies

- Rheumatoid arthritis
- Familial Mediterranean Fever
- Lupus
- Gout
- Sjogren's syndrome
- Bulimia
- Marfan's syndrome
- Psoriatic arthritis

Rheumatoid Arthritis-Radiographic Features

- 30% exhibit detectable radiographic changes
 - Flattening of anterosuperior aspect of condyles
 - Irregular destruction of the Temporal fossa
 - Changes most often bilateral

Rheumatoid Arthritis-Treatment

- Painless of a problem as is dysfunction
- Local treatment:
 - Aspirin or NSAIDS
 - Therapeutic exercises
 - Intrasynovial steroid injections

Juvenile Rheumatoid Arthritis-Clinical Features

- Severe micrognathia due to interruption of growth
- Generally bilateral, but occasionally unilateral
- Complaint of pain rare (except synovitis)
- Open bite rare

JRA-Treatment

- Treat pain with aspirin or NSAIDS
- Synovectomy possible for temporary relief of pain
- Observation for disease to "burn out"-follow cephalometrically

- Correction of occlusion
 - Orthodontics
 - Orthodontics and orthognathics
 - Prosthetic joint replacement
 - Prosthodontics

Familial Mediterranean Fever

- Very rare disorder, 85% involves Sephardic Jews and American
- 70% of cases occur before the age of 10

Lupus Erythematosus

- Polyarthritits
- Conjunctivitis
- Nasal or mouth ulcers
- Skin rash
- Changes in urine or bowl habits

Eating Disorders

- Anorexia Nervosa
- Bulimia

Diagnostic Tests

- Comparisons of bone mineral density (BMD)
- Biochemical indices (Urinary HOP-parameter of osteoclastic activity)
- Markers for bone formation and resorption

Anorexia Nervosa

- If AN occurs before or during adolescent growth spurt, it can impair bone development (Lacy et al Postgrad Med J 1979)
- Also results in decreased bone mineral density (BMD)

Marfan's Syndrome

- Congenital heart defects
 - Aortic root enlargement
 - Mitral valve prolapse
- General "looseness" and hypermobility of all joints
- Limit sports participation

Marfan's Syndrome

- Extreme height-arms span may be disproportionately longer than body and height
- Late psysical maturation

Postoperative Condylar Resorption

- Type of fixation?
- Maxillomandibular immobilization?
- Skeletal type?
- Condylar loading?
- Age tendency?
- Gender?

Conclusion-POCR

- Beware the high angle Class II, open bite
- Follow for 2 years postoperatively
- When discovered, treat like root resorption-finish mechanics