Osteoarthritis of the Hand

Simon Chambers June 28th 2010

Prevalence & Aetiology

- Uncommon under age 50
- Very common in older people (55-65)
 - 62% DIPJ
 - 40% PIPJ
 - 33% TMCJ
 - 20% MCPJ
- Usually primary, F>M, hereditary

Presentation

- Stiffness
 - Morning
- Weakness
- Deformity
- Disabling pain is <u>uncommon</u>
 30% of Xray OA assoc with pain

Interphalangeal joints

- Heberden's nodes (distal)
- Bouchard's nodes (proximal)

- Osteophyte and soft tissue

- Transient stiffness, progressing
- Extension usually preserved
- Pain, tenderness, mucous cysts

William Heberden 1710-1801

• "What are those little hard knobs, about the size of a small pea, which are frequently seen upon the fingers, particularly a little below the top, near the joint? They have no connection with the gout, being found in persons who never had it; they continue for life; and being hardly ever attended with pain, or disposed to become sores, are rather unsightly, than inconvenient, though they must be some little hindrance to the free use of the fingers."

Digitorum Nodi



Bouchard's Nodes





Mucous cysts



Radiographic findings



- Joint space narrowing
- Osteophyte
- Subchondral sclerosis
- Cyst formation

Radiographic findings



Metacarpophalangeal joints

- Secondary OA more common (fight bites)
- Locking
 - Index /middle
 - Osteophyte catches RCL

Thumb

- Trapeziometacarpal
 - Usually primary / constitutional
 - May be secondary to Bennett's fracture
- Thumb MCPJ
 - More common than fingers
 - Occastionally due to UCL injury
 - IPJ
- Painless stable post

Thumb base anatomy

- IPJ range of movement -30 to 60
- MCPJ very variable
- Basal thumb articulation:
 - Trapeziometacarpal
 - Scaphotrapezial
 - Scaphotrapezoid
 - Trapeziotrapezoid
 - Trapeial-2ndMC



History and Examination

- Pain more prominent feature
- Associated with CTS (night pain)
- Thickened joint
- Abduction deformity of thumb MC
- Hyperextension of MCPJ
- Subluxation of TMCJ

Thumb base OA

