Treatment of Glenohumeral Joint Arthritis in the Young Individual

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Younger patients with GH arthritis generally have more complex pathologies and outcomes of arthroplasty outcomes are less predictable. Factors that are more important include: higher activity levels, great functional expectations and implant longevity. Treatment options can be broken down into 3 broad categories: non-operative, non-prosthetic and arthroplasty.

Factors affecting decision making include: more complex etiology with potentially worse outcomes, ie., capsulorraphy arthropathy, post-traumatic arthropathy, osteonecrosis and rheumatoid arthritis. Social factors include occupational demands and hobbies such as manual laborers and athletics. Mono-polar (one-sided) arthritis is more common in post-traumatic arthritis, rather than bi-polar arthritis seen in primary OA.

Non-operative management:
- activity modifications, occupational changes, PT, non-narcotic pain management and intra-articular injections (cortisone and viscosupplementation).

Operative management: Non-prosthetic -

Arthroscopic debridement

Arthrodesis

Cartilage repair and reconstruction

Operative management: Arthroplasty -

Humeral Head Resurfacing
- partial and total

Humeral Head Arthroplasty with stemmed implant

Reconstruction of the Glenoid Joint Surface
- "ream & run"
- glenoid inter-positional grafts

Total Shoulder Replacement with Polyethylene glenoid component

Resurfacing Total Shoulder Replacement - (CAP/TSA)
Recent Literature:


"The Prognosis for Improvement in comfort and function after the Ream-and-Run arthroplasty for glenohumeral arthritis" B Gilmer, B Comstock, J Jette, W Warme, S Jackins & F Matsen JBJS 2012;94:e102(1-9). http://dx.doi.org/10.2106/JBJS.K.00486


"Shoulder Arthroplasty in patients aged Fifty-five years or younger with Osteoarthritis" R Bartelt, J Sperling, C Schleck & R Cofield JSES 2011;20:123-130 http://dx.doi.org/10.1016/j.jse.2010.05.006

