Clinical Practice Guidelines for Shoulder Arthritis

Physical Therapy in San Jose, Los Gatos, Foster City and Burlingame for Shoulder

Orthopedic surgeons continue to seek evidence to guide all aspects of patient care. In this document, the American Academy of Orthopaedic Surgeons (AAOS) offers 16 guidelines for clinical practice in the care of patients with shoulder osteoarthritis.

There is a wide range of issues related to shoulder arthritis. The fact that the shoulder joint can be replaced with a joint replacement (implant) has changed the way patients are treated. Younger patients with shoulder arthritis has helped push the envelop so-to-speak, meaning the search is on for the right treatment for all ages.

Every day surgeons around the world weigh the pros and cons for the treatment of their patients' painful shoulder arthritis. Patient factors such as age, occupation, severity of symptoms, general health, and education level are taken into consideration when choosing a treatment path. The surgeon's examination and X-ray findings also provide important information when forming the plan of care.

But everyone wants evidence that guides these clinical treatment decisions and that's what this article provides. Well, the authors actually offer what they found by way of reviewing the published studies available. In the end, they come up with 16 recommendations but admit that nine of them are not based on solid evidence. Only two of the 16 recommendations could be agreed upon by all 15 panel members.

Let's start with the two confirmed recommendations and then take a look at the major points for the remaining 14 guidelines. The consensus was that first, prevention of blood clots after shoulder arthroplasty (medical term for joint replacement) is a top priority. Prevention must take place using mechanical and/or chemical means. And second, patients who have a torn rotator cuff are not good candidates for shoulder replacement.

The remaining guidelines cover a variety of treatment options from drug management and Physical Therapy to steroid injections, viscosupplementation, and arthroscopy. Specific surgical techniques such as the use of a hemiarthroplasty (only one half of the joint is replaced) versus a total arthroplasty (both the humeral head and the cup or socket are replaced) are discussed. The following key points are offered:

- Based on current available studies, the panel couldn't recommend for or against the use of Physical Therapy, pharmacology (medications), or steroid injections.
- There is weak evidence that injection of hyaluronic acid to aid joint lubrication can reduce pain and improve motion.
- The use of arthroscopy to look inside the joint, smooth ragged surfaces, and remove any free-floating pieces of cartilage or other loose bodies may put off joint replacement but there isn't enough evidence to support its use as a stop-gap measure. This doesn't mean it's not a beneficial procedure. It just means there weren't enough high-quality studies to recommend for or against arthroscopic treatment.
- Hemiarthroplasty (replacement of part of the joint) has good results but total shoulder replacement still seems to work better for the diagnosis of shoulder osteoarthritis. Many patients who received a hemiarthroplasty ended up having a second surgery to convert to a complete joint replacement.

As far as which implant design has the best results -- there haven't been enough good studies done comparing the many implants available. The same is true for comparing ways of holding the implants in place: pegs (uncemented) versus cemented.

In summary, the 16 clinical practice guidelines for the treatment of shoulder osteoarthritis are lacking in the necessary scientific evidence. The 15-member panel could all agree on one thing: there aren't enough studies on this topic to come up with strong recommendations. And there are very few studies investigating the nonsurgical approach to treatment.

Physical Therapists and pharmacists have their work cut out for them when it comes to comparing conservative (nonoperative) treatment options and methods and finding the ones that work best. Likewise, when it comes to surgical techniques and methods, surgeons must study ways to reduce and prevent complications such as infection, blood clots, and failed implants.

The goal of clinical practice guidelines like these is to improve treatment and make sure treatment is always based on the best (current) evidence available. There's plenty of room for improvement in these clinical guidelines.

Revisions will be published as new studies are published and reports with updated data can be analyzed. Until then, surgeons can use these 16 recommendations as guidelines when making clinical decisions affecting adults with painful and disabling shoulder osteoarthritis.

Reference: Rolando Izquierdo, MD, et al. Treatment of Glenohumeral Osteoarthritis. In Journal of the American Academy of Orthopaedic Surgeons. June 2010. Vol. 18. No. 6. Pp. 375-382.