Clinical Decision Making Based on Evidence

Surgeons make decisions with patients about when to operate and when to recommend nonoperative care on a daily basis. We must decide when to investigate and which investigations to order. If it is to be surgery, the decision on which operation is the best should, ideally, be based on prospective, randomized controlled studies, free of bias and relevant to the clinical decision. However, in many cases we ask “Do we have sufficient evidence?” The answer is: in some cases “Yes” and in some cases “No.”

A study by Vitale et al. showed that the rate of rotator cuff repair in the United States varied up to 9 times from one state to another. This large variation was not related to the density of orthopaedic surgeons in a given state, and the rates were inversely proportional to population density. In other words, there is a lack of evidence in the literature to support surgical decision making. This variation in orthopaedic surgeons’ perceptions about the indication for rotator cuff surgery was further highlighted in a study by Dunn et al. In a survey of the members of the American Academy of Orthopaedic Surgeons, these authors found significant variations in the surgeons’ understanding of the natural history of the condition and indications for surgery.

Level I evidence is desired for all clinical decisions but it is not always available. In many cases, we have to make clinical decisions without adequate evidence. Although our research will constantly strive to improve our evidence-based knowledge, we will always have to use our common sense to make clinical judgments to help patients. Nevertheless, an in-depth understanding of the available evidence will always assist us to take better care of patients. Starting in this issue of Arthroscopy, the members of the ISAKOS Scientific Committee are sponsoring the publication of a series of evidence-based medicine reviews on topics that are of significant relevance to its readership. Of these articles, there will be some with a lot of evidence but in others there will be less. In all cases, we hope to provide a deeper understanding of the available evidence that will help us and our patients.

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REFERENCES