Interrator reliability in osteoarthritis

Michael Gross, MD*

 ${f I}$ n this issue (page 267) Dervin and associates have studied an area of concern to many practising surgeons: the ability for us to examine and document changes in patients with respect to osteoarthritis of the knee. In general, we base our intent to operate on the results of a combination of the patient's history and findings on physical examination. Therefore, it is appropriate to examine the ability to use the results of physical examination when performed by different individuals — and the results as stated in this paper are not encouraging. Dervin and associates found little correlation among surgeons or fellows with respect to their ability to diagnose unstable meniscal injuries in the osteoarthritic knee.

Does this mean that we should stop performing physical examination when research shows that we do not get good interrator reliability? I think that the answer is a qualified no. The qualifications relate to the other factors that can influence the ability of individuals to perform competent and specific examinations.

First, physical examination is learned by repetition, hence the use of the Observed Structured Clinical Examination for medical students to ensure that physical examinations are done thoroughly and in a standard fashion. This skill is as important as are technical surgical skills in training the surgeon, and as trainers we must demonstrate that we all perform a physical examination in a specific way.

The second point relates to experience. We tend to discount the ability that a more experienced surgeon brings to the patient. Accurate physical examinations are improved as a result of experience. Can we state that the more subtle changes in the physical examination are detected by physicians and fellows to the same degree? Fellows are really still in training to a higher skill level, and that training will be further developed by the constant practice of good physical examinations during the first 5 to 10 years of practice. We need to look at the skill sets that experienced surgeons bring to the table. The late Dr. Apley1 had a wonderful ability to demonstrate his superior examination skills and train others to reproduce them. Perhaps we need his trainees to perpetuate that work.

The last point relates to the idea that diagnostic imaging will be or is an acceptable substitute for the physical examination. Unless the surgeon has performed an accurate physical examination and obtained a relevant history, his or her diagnostic ability will be limited. The history and physical examination prepare the surgeon to look for specific abnormalities and anatomic variance. Therefore, diagnostic imaging should be used as an adjunct to the history and physical examination. Furthermore, to delegate diagnostic testing to others is not in the best interests of our patients, since surgeons are the best suited to correlate all of the information about a patient, to formulate a treatment plan and to observe how well that treatment has served the patient.²

Research as demonstrated in the paper by Dervin and associates is important because it allows us to reevaluate our training and our performance at the patient's bedside.

References

- Apley AG, Solomon L. *Concise system of* orthopaedics and fractures. 2nd ed. Boston: Butterworth–Heinemann; 1994.
- Nayak KN, Rorabeck CH, Bourne RB, Mulliken B, Robinson E. Interpretation by radiologists of orthopedic total joint radiographs: Is it necessary or cost-effective? [see comment]. *Can J Surg* 1996;39(5): 393-6. Comment in: *Can J Surg* 1997; 40(2):147-51.

^{*}Professor of Surgery, Dalhousie University, Halifax, NS. Member, Editorial Board, Canadian Journal of Surgery

Correspondence to: Dr. Michael Gross, Rm. 4879, Queen Elizabeth II Health Sciences Centre, 1796 Summer St., Halifax NS B3H 3A7; fax 902 473-2042

^{© 2001} Canadian Medical Association