

### ASSESSING OUTCOMES OF SURGICAL PROCEDURES

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The article in this issue by Young and her colleagues (page 188) is an important one and appropriate for readers of the Journal. The authors' objectives were to review the appropriate literature and to identify those patient factors that would correlate with functional outcome and prosthesis survival after total hip arthroplasty. In their introduction they note that the literature was difficult to assess because of methodologic flaws, heterogeneous observations and variable reporting methods. They found it impossible to conduct a meta-analysis, which they considered the preferred methodology for presenting this type of information. Their findings are extremely well presented and appear reliable. Their conclusions are logical and important.

In conjunction with the difficulties in reviewing the orthopedic literature, Young's group also noted that the definition of an outcome is inconsistent, and they tacitly imply that the way in which different patients define a desirable outcome may differ. They included prosthesis survival because it is the most commonly reported outcome. If one defines prosthesis survival as those prostheses not requiring revision, then revision is the least controversial outcome measure and the most comparable factor between studies. It is important to note that prosthesis survival may not represent a sat-

isfactory outcome for the patient and that the definition of prosthesis survival as the major outcome variable is a necessary but not a sufficient way to define an adequate outcome.

Long-term outcomes must be studied systematically so that several alternatives may be compared. There is inadequate clinical research with statistically acceptable methods and focus to consider variations in practice and to achieve objective evidence-based decision-making or efficient high-quality evaluation. Patient-oriented results must consider symptoms, function, quality of life (QOL) and patient satisfaction. QOL has many definitions but must permit multifactorial considerations and patient differences and must be disease dependent. These QOL outcome measures must also allow for different and often changing priorities for the patients over time.

The World Health Organization defines QOL as a state of complete physical and social well-being not merely the absence of disease or infirmity.<sup>1</sup> The question of who should measure QOL — the doctor or the patient — is important. Patient-selected QOL measures usually focus on physical, psychological and interpersonal well-being, and QOL scales must be divided into disease-specific, function-specific and population-specific domains. Health-related QOL studies must reflect these 3-dimensional

domains: objective, subjective and health specific. The objective QOL domain encompasses general health and functional status, along with social status, whereas the subjective domain deals with life satisfaction and measures of self esteem.

We must attempt, in our assessment of treatments, to ask and be sensitive to the question "What do these patients really want?" These QOL domains resolve into physical states and functional abilities as follows: psychological status and well-being, social interactions, and the impact of the disease and the treatment on economic status. Measurement tools may be broad and empiric or specific to symptoms, functions and population, but in all cases, the health-related QOL measurement tools must be assessed for reproducibility, validity and responsiveness. Outcome instruments, usually questionnaires, must assess the clinical factors of interest, account for the fact that over time what is important to the patient changes in relation to current physical, psychological and physiologic status. Generally, the domains in health-related QOL that are of greatest importance to young people are social (friends), emotional, sexual, sports, recreational and financial. These priorities change with age, physical ability and disability, sex and the extent of the surgery performed, along with any diagnostic criteria.

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Generally speaking, physical activity is 2 to 3 times more important than pain and emotional concerns. When we critically analyse the available literature on this subject, we recognize that patient priorities differ according to demographics, disease, the physical and functional deficit and the duration of follow-up.

When performed by experienced surgeons, total joint arthroplasty gives excellent results and often a variety of improvements in different outcome measurements. The impact of the outcome of the procedure on the QOL of our patients must be evaluated, compared and reported.

The type of analysis put forward by Young and colleagues is timely and critical because of the continued inter-

est in functional outcome measures for frequently performed and costly surgical interventions. The authors have combed the literature for key performance indicators and have concluded that despite the limitations of the existing literature, several patient factors appear to affect the outcome of total hip arthroplasty. These factors may be important for heightening clinician awareness of patient factors and how they might be associated with outcomes of total hip arthroplasty, for educating journal readers about the various ways in which these patient factors could mediate outcomes, for highlighting areas of controversy, which are many in this field, and for providing the impetus, justification and focus for future research

into patient factors that may predict outcome after total hip arthroplasty. All these objectives and purposes combine to make this an extremely relevant article. Further, the article is well written, clear, succinct and extremely well referenced. It will also be relevant to journal readers outside of orthopedics, since these questions are being asked in other areas of surgery.

### Reference

1. WHO Expert Committee on Cancer Pain Relief and Active Supportive Care. *Cancer pain relief and palliative care: report of a WHO expert committee*. no. 804 of *Technical Reports* series. Geneva: World Health Organization; 1990.

## SESAP Critique / Critique SESAP

### ITEM 228

Although not common, leiomyoma is the most frequently occurring benign tumor of the esophagus. Many lesions are small and asymptomatic, but persistent slow growth with the eventual development of symptoms is predictable, and excision of identifiable lesions is indicated.

Leiomyomas do not involve the esophageal mucosa and rarely adhere to contiguous structures. Complete removal is necessary to prevent continued growth and recurrence of symptoms. The preferred excisional technique is esophagomyotomy and enucleation. Endoscopic resection avoids the need for thoracotomy but involves disruption of the esophageal mucosa and may result in a predisposition to subsequent stricture formation. Completeness of resection may result in a predisposition to subsequent stricture formation. Completeness of resection may also be less reliable with this approach. More extensive extirpative techniques such as segmental or complete esophagectomy are unnecessary; lesser techniques such as esophageal dilatation are ineffective.

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#### References

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- 228/2. Scanlon EF: The esophagus, in Nora PF (ed): *Operative Surgery*. Philadelphia, Lea & Febiger, 1974, pp 293, 296