

Editorial

Reporting hip fracture in the elderly

With but one decade to go, it is quite clear that in the next century fracture in the elderly will constitute a major problem in postindustrial societies around the world. Orthopedics will have a key role in coping with this onus in the same way as we have managed tuberculosis, septic arthritis, and poliomyelitis of earlier generations. The solution to the threat of these infectious diseases was prevention by vaccination, hygiene, and improved living standards. Before that stage, orthopedics provided the only effective therapy to countless individuals. Today, this is precisely the situation for fracture in the elderly. The population pyramid is changing into a cylinder – we are getting proportionally more elderly citizens; further, the age-specific fracture risk is increasing; and, finally, we have no realistic hope of preventing the fractures that will strike our elderly 10 or 20 or even 30 years from now. The prediction of the number of individuals who are 30 to 40 years old today and who will sustain a hip fracture in the 2030s rests on a solid epidemiologic base.

Comparison of fractures in the elderly, notably hip fracture, with tuberculosis and polio is also appropriate because management of these conditions required not only surgery, but also rehabilitation, i.e., a chain of events where social factors are as important as surgery.

At present, there is no generally accepted program for operation, mobilization, and rehabilitation of the elderly with a hip fracture. Comparable patients with a cervical hip fracture are subjected to primary arthroplasty by some orthopedists and nailing by others, and there are many different types of nails. Some orthopedists keep the patients off weight bearing after internal fixation, others encourage immediate mobilization, some nail undisplaced fractures for immediate mobilization, and others prefer orthoses and nonweight bearing in the same situation. Widely different patterns also apply to the rehabilitation period, with discharge of the patient to his or her own home advocated by some orthopedists and institutional rehabilitation by others.

Both for the patient and for the taxpayer, the ideal management is precise surgery and rapid return to the prefracture habitat; yet, hardly any consensus has developed as regards the definition of these goals in concrete terms. In fact, whereas hip fracture patients may occupy a quarter of the orthopedic beds in acute hospitals in countries with an aging population, there are few reports that permit comparisons of different methods of surgery, mobilization, and rehabilitation. This means that the very basis for a consensus dialogue simply does not exist in this important sector of orthopedics.

Acta Orthopaedica Scandinavica invites contributions concerning all the phases of the treatment of elderly patients with a hip fracture. This commitment includes comments on the classification and standardization of key parameters, for example, types of fracture, evaluation of surgical precision, the medical and social conditions of the patients including follow-up examinations, definitions of mortality data, complications, reoperations, and the like.

As a beginning, *Acta* has decided to simplify the classification of cervical hip fracture. The Garden classification has suffered from the principal deficit that it is based on frontal radiographic projections and the practical flaw that in terms of clinical outcome there have been no differences between Stages I and II, and III and IV, respectively. Strömqvist and Hansson (1983) have shown that the incidence of femoral head necrosis is the same in Stages III and IV, and Eliasson et al. (1988) in this issue have now shown that the anatomic displacement does not differ in Stage I compared with Stage II, nor in Stage III compared with Stage IV, confirming the report by Frandsen et al. (1986) that even trained orthopedists or radiologists cannot reliably differentiate between closely related subsets of hip

fractures. Therefore, *Acta* will prefer to simply distinguish between *undisplaced* (Garden I and II) and *displaced* (Garden III and IV) cervical hip fractures. Time will tell whether or not measurement of the trochantero-articular distance will aid in the postoperative evaluation of fracture subjected to osteosynthesis.

Acta's commitment to the hip fractures will not occur at the expense of other sectors of orthopedics. However, comparison with total hip replacement emphasizes the need for more and better reports on the fractures. In Lund the Department of Orthopedics uses five times more hospital beds for hip fracture than for hip replacement. In Malmö the number of hip fractures has increased from 62 in 1950 to 611 in 1987. The 10-year failure rate of total hips is about 10 percent, whereas reoperation in failed cervical hip fractures is generally reported as 20 percent or more (Nilsson et al. 1988). In hip surgery, fracture is thus presently a more pressing problem than arthroplasty. In terms of research and development the fractures may also well be more rewarding: there is a wide margin for improvement in current clinical practice . . .

This is the background for a nationwide prospective study of hip fracture treatment, initiated by the Swedish Orthopedic Society and sponsored by the Medical Research Council. The study has already from the start been joined by units in other countries; the announcement on page 482 in this issue invites additional participants and provides information concerning the project protocol and forms. *Acta Orthopaedica Scandinavica* plans to publish data expeditiously from this international multicenter study.

National and international databases are being developed in response to a rapid and coordinated scientific effort to face the HIV challenge (Layne et al. 1988). Albeit less dramatic, the need for similar efforts in orthopedics is equally well established. *Acta Orthopaedica Scandinavica* is prepared to support this international development (Editorial 1988).

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