

Editorial

Lessons from the treatment of slipped capital femoral epiphysis

By tragic coincidence, this issue of *Acta Orthopaedica Scandinavica* contains the obituary (1) of the senior author of the accompanying supplement no. 226 (2), a major work describing 532 cases of physiolyis of the hip, followed by three generations of orthopedic scientists in Lund, Sweden. Together with his associates, Lars Ingvar Hansson dedicated this monograph to his predecessors; the irony of fate has now turned it into a memorial to himself. It is no hyperbole to predict that this monograph will become a classic – this is ensured by the number of cases, the length and completeness of follow-up, and the comprehensive epidemiology. Indeed, for many decades to come, this monograph will be consulted and quoted by future students of physiolyis of the hip.

However, the importance of this work transcends its subject matter by demonstrating that for several decades after orthopedics was introduced as a speciality at Lund University Hospital children with the classic condition physiolyis of the hip were still being treated by methods that had an unfavorable effect on the natural history of the condition: viz., plaster spica with the hip internally rotated, forceful reduction of the deformity, and osteotomy of the femoral neck – all of which have been subsequently recognized as unfortunate experiments, illustrating the slow evolution of medicine. Progress would have been more rapid if the experimental nature of the treatment of this classical orthopedic condition had been realized at the time of the propounding of the hypotheses upon which successive treatment modalities were based.

The therapeutic misfortunes described in the monograph by Hansson and coworkers and the years lost by generations of children with Perthes' disease – who were kept off weight bearing and often institutionalized – should provide the impetus for better control of methods and follow-up in children's orthopedics.

The majority of the orthopedic diseases in childhood in the developed countries of the West are rare, and their causes are largely unknown. In several of these conditions, early detection has been proved important, but many cases are still unnecessarily missed; in southern Sweden, one third of the children with physiolyis of the hip have a history of pain or limping exceeding 3 months before diagnosis – 50 years of expanding health care has decreased the average diagnostic delay by but 1 month. How good is the safety net that should guarantee the early diagnosis of congenital dislocation of the hip? What are the results of the operations for Perthes' disease? Which methods can best ensure early detection and treatment of scoliosis?

The two senior investigators responsible for the most thorough follow-up of the longest series of patients with physiolyis of the hip are Ignacio Ponseti (3) in Iowa and Lars Ingvar Hansson in Lund, both of whom were well known for their experimental laboratory contributions before they were established orthopedic surgeons. Further progress in orthopedics, from congenital dislocation of the hip to fracture of the hip in the elderly, will require the discipline of the basic sciences and the tradition of long-term follow-up of clinical materials.

In many sectors of medicine the difference between success and disaster in diagnosis and therapy is evident after a few days, weeks, or months. In children's orthopedics, this time scale may stretch into decades. Even at the other extreme of life, in the elderly, 10 years may be too short to establish that a new design for arthroplasty is successful. The task of organizing comparative studies with adequate follow-up should be the responsibility of orthopedic professional societies and of academic orthopedics (4).

References

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4. Bauer G C H. Sir Astley Cooper. Prototype of the modern day academic orthopedist. *Clin Orthop* 1987;(225): 247–254.