

Lars Ingvar Hansson

1937-1987



Lars Ingvar Hansson died unexpectedly on November 2, 1987, at the age of 50 years. A cardiac infarction has torn him away from his family, his friends, and his intense professional activities. The Swedish Orthopedic Society has lost a prominent member.

Lars Ingvar Hansson was born in Skurup in southern Sweden. He studied medicine in Lund, defended his thesis for the Ph.D. degree in 1967, and graduated in 1968. During the period 1960-1969, he lectured and trained medical and dental students at the Department of Histology in Lund, where his research started under the guidance of Professors Gösta Glimstedt (histology) and Gunnar Wiberg (orthopedics).

Lars Ingvar Hansson was one of the pioneers to use tetracyclines to study longitudinal bone growth (Figure 1), documented in his thesis *Daily Growth in Length of Diaphysis Measured by Oxytetracycline in Rabbit Normally and after Medullary Plugging*. For his work, he won an appointment as an assistant professor of histology.

His procedure for processing and precise measurement became the basis for numerous investigations on various types of influence on bone growth. Under his scientific guidance, the Hansson tetracycline method was successfully applied in numerous theses: Göran Sundén (nervous influence), Björn Persson (oxygen tensions), Sven-Arne Ahlgren (dentine apposition), Östen Hedström (fractures), Niels-Olaf Christensen (stapling), Karl-Göran Thorngren (endocrine influences), Stefan Aronsson (correlation with stereophotogrammetry), and Anders Stenström (cortical bone remodelling). Lars Ingvar Hansson led his pioneering investigations to become the firm pillar for continuing research, which made him a well-known expert on bone growth. His investigations, indeed, gave us a better understanding of the mechanisms influencing bone growth with applications to clinical problems.

In 1969, Lars Ingvar Hansson moved from histology to join the Department of Orthopedics in Lund, where he was appointed associate professor in 1971. The department was now headed



Figure 1. Fluorescent bands (yellow) in proximal fibula corresponding to two oxytetracycline injections given 2 days apart to a 30-day-old rabbit.

by Professor Göran Bauer. During the following years, Lars Ingvar Hansson held combined clinical teaching and research positions.

Besides the tetracycline method, Lars Ingvar Hansson was also a pioneer in applying roentgenstereophotogrammetry to clinical problems, which he developed for clinical use with Göran Selvik. Under their guidance, roentgenstereophotogrammetry was used to study clinical bone-growth problems, as well as the positioning and micromotion of arthroplasties and pelvic osteotomies, resulting in additional doctoral theses: Halldor Baldursson (hip arthroplasty in rheumatoid arthritis), Birger Bylander (stapling in children), Johan Kärholm (ankle fracture in children), and Bengt Mjöberg (loosening of cemented hip prostheses).

In his clinical work, Lars Ingvar Hansson was especially interested in children's orthopedics, spinal surgery, and hip fracture. He developed an osteosynthesis for physiolsis of the hip (Figure

2), which some years later he also successfully modified for femoral neck fractures (Figure 3). The device is called "the Hansson pin system," or "hook-pins," and is now widely used in Sweden and Great Britain. The major principle is the minimizing of trauma in insertion of the pins combined with the hook-fixation mechanisms from the Rydell nails, from which the wings were removed. His work on physiolsis of the hip resulted in two theses under his guidance in 1986 by Gunnar Ordeberg and Gunnar Häggglund. These investigations are presented in the supplement to this issue of *Acta Orthopaedica Scandinavica*.

Today, hip fracture in the elderly has become a major problem in orthopedics and for society as a whole. Lars Ingvar Hansson's thorough work on cervical hip fracture comprised, in addition to osteosynthesis, scintimetry and tetracycline studies for prognosticating the survival of the femoral head after neck fracture. Under his guidance, Reiner Brümmer (strontium scintimetry) and Björn Strömqvist (technetium MDP-scintimetry), in 1983, presented their theses on hip fractures. The comparative clinical study Hansson led for osteosynthesis of cervical hip fractures was a pioneering work introducing prospective randomized investigations for the application of a new operative method. In 1981, Lars Ingvar Hansson

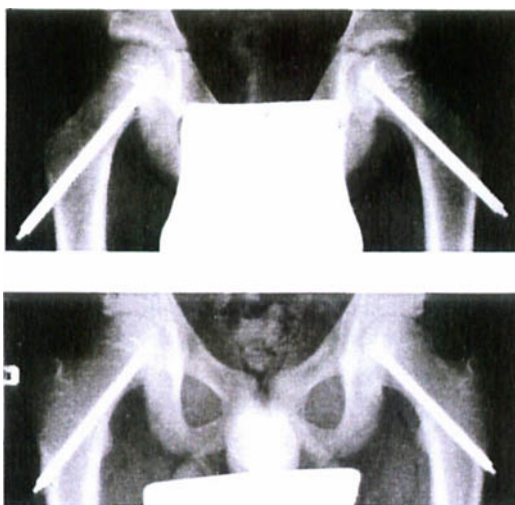


Figure 2. A 13-year-old boy with Hansson hook-pinning of both hips (upper) because of physiolsis (left) and prophylactically (right). The hook pin permits normal growth of the femoral neck without risk of losing fixation. This is demonstrated by the apparent retraction of both pins 3 years later (lower).

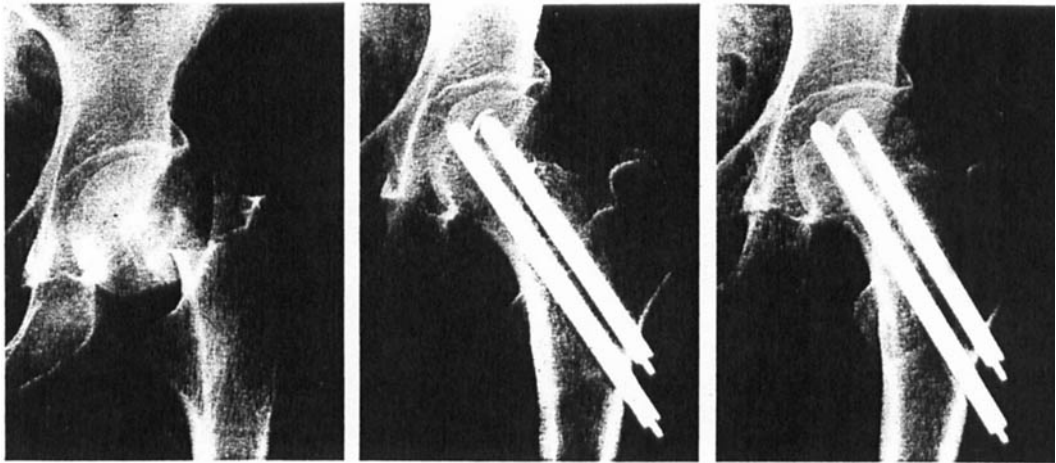


Figure 3. A 54-year-old woman with a displaced femoral neck fracture before and after reduction and fixation with two hook-pins. At follow-up 2 years later, the fracture had healed without evidence of necrosis (right).

was awarded the Lund University Fernström prize to younger investigators.

From 1983, Lars Ingvar Hansson was Professor and Chairman of the Department of Orthopedics at the University Hospital in Umeå in northern Sweden. During these years, he improved the organization and quality of the orthopedic care in his region and managed recently to expand the care facilities with a newly opened orthopedic department at the local hospital in Skellefteå. Besides his administrative duties, Lars Ingvar Hansson continued his clinical work and research projects in Umeå.

Throughout his research, Lars Ingvar Hansson had an inexhaustible supply of new ideas and viewpoints, and he combined experience from his experimental research with clinical problems. He was a prominent example of Swedish academic orthopedics, spanning the wide field from cellular function to operations and clinical follow-up. Lars Ingvar Hansson had an extraordinary working capacity and was truly devoted to the science of

orthopedics, which occupied most of his professional and leisure time – the latter much to the detriment of his golf game. The clinical problems he encountered were rapidly turned into successful research projects of future benefit to additional groups of patients. He was inspiring, clear-sighted, straight forward, and energetic in his work, which was combined with an extraordinary memory for details; for example, he remembered for decades numerous patients' names and addresses to his associates' great consternation. His research continued energetically, as is evident from his list of publications.

Lars Ingvar Hansson was a truly honest, kind, and upright human being. Plans that were made were always completed, and his judgement and advice were sound and realistic. He is missed by his wife, his three sons, and his daughter, and by his many friends and colleagues.

Karl-Göran Thorngren
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