

# Osteoarthritis and Cartilage

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## New perspectives in diagnosis and therapy of osteoarthritis—papers presented at the International Workshop of the Department of Orthopaedic Surgery at the University of Ulm, Germany, 11–12 November 1996

### Foreword

Osteoarthritis is the most common joint disorder and presents a major public health problem due to its high prevalence among elderly people, its heavy psychosocial and financial implications, and the resulting burden imposed on health services [1]. The understanding of the disease process at both clinical and basic levels has significantly advanced over the past few years. New concepts of pathogenesis developed on the basis of intense research raise the possibility of specific approaches towards preventive as well as therapeutic modalities. The prospect of new and possibly disease-modifying therapies for osteoarthritis provides a strong rationale for the development and use of standardized methods for diagnosis and monitoring of the disease. Such methods may use patient-centred outcomes, clinical examination, imaging, as well as techniques of biochemistry and molecular biology.

In November 1996 a workshop 'New Perspectives in Diagnosis and Therapy of Osteoarthritis' was held under the auspices of the study group 'Bindegewebforschung und Arthrosis deformans' of the German Society of Orthopaedic Surgery and Traumatology (DGOT). The goal of this workshop was to summarize the current knowledge of adequate measures of disease activity and outcome and to discuss the significance of new therapeutic perspectives. Presentations of this workshop—related to clinical and radiographic outcome measures—appear in this issue of 'Osteoarthritis and Cartilage', to provide interested readers with some aspects of the topics discussed at the meeting.

The paper of E. Roos and co-workers underlines the significance of patient-centred assessment in their cohort of middle-aged subjects with knee OA after meniscectomy, who have high demands on functional activities and life style. The authors clearly show, that the addition of two new

dimensions to the WOMAC Osteoarthritis Index improves the sensitivity of outcome measurement in OA-patients with an active life style and moderate functional impairment.

The contribution of A. Carr focuses more on measurement of handicap in OA. Handicap as an indicator of personal and social consequences of a disease depends not only on the severity of functional impairment, but also on the patient's life role. The author presents different measurement tools and discusses the aspects of appropriate choice. Of particular interest are the outlined controversies in health status measurement with regard to generic versus disease-specific and standardized versus individualized tools.

Approaches in *radiographic assessment* of patients with OA of large, weightbearing joints [2, 3] have changed during the past years. P. Ravaud and co-workers summarize the influence of different radiographic techniques on radiological findings and discuss factors affecting structural disease progression, such as demographic data and characteristics of OA. They provide us with a helpful overview on choice of appropriate views and radiographic features, which may be of particular interest in the design of clinical trials and epidemiological studies. They also clearly emphasize the need for standardization of radiographic procedures.

When all steps from patient positioning to the reading of X-rays are highly standardized, reproducible results can be obtained. This is demonstrated by the investigation of K. P. Gunther and Y. Sun. They describe how recently published radiographic grading systems in hip and knee OA have been tested for their reproducibility in a national study group. In contrast to some earlier reports, a high intra- as well as inter-observer-reliability of the Kellgren & Lawrence Score could be demonstrated. Nevertheless, grading of OA severity in clinical studies should be performed

with individual features (joint space, osteophytes) due to their higher sensitivity to change.

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**Stefan Lohmander**

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