

Clinician's Manual on Axial Spondyloarthritis

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Authors' biographies

Joachim Sieper, MD, is a Consultant and Head of Rheumatology at the Charité University Hospital, Campus Benjamin Franklin in Berlin, Germany. After receiving his medical degree in 1978 from Free University, in Berlin, Germany, he underwent his training in internal medicine in the Department of Cardiology at the Rudolf–Virchow clinic in Berlin, Germany. He continued his training in internal medicine and rheumatology at the University Hospital Benjamin Franklin, in Berlin, Germany. During this time he had a number of fellowships abroad including 8 weeks at The London Lupus Clinic, Hammersmith Hospital, in London, UK, led by Professor Graham Hughes. He also spent over a year at the Rheumatology Unit of Guy's Hospital, in London, UK, led by Professor G Panayi. In 1998 he became Professor of Medicine at Free University and that same year he was also appointed Deputy Head of the Department of Internal Medicine at the same institution. In 2000 he became Head of Rheumatology at Free University.

Professor Sieper is also a prolific researcher and writer. He has been an investigator since 1989, and a principal investigator since 1993 on several placebo-controlled randomized trials, which have been published internationally. He has authored and contributed to over 300 journal papers.

He is a member of numerous societies including the German Society of Rheumatology and the American College of Rheumatology.

He has also been the recipient of many awards and honors for excellence in rheumatology, including the Carol-Nachman award for rheumatology in 2000 and the European League Against Rheumatism (EULAR) award in 2003.

Jürgen Braun, MD, is Medical Director of the Rheumatology Medical Centre, Ruhrgebiet in Herne, Germany, and is a lecturer at the Ruhr University in Bochum, Germany. He is also an honorary Professor in Rheumatology at the Charité Medical School in Berlin, Germany.

He received his doctor of medicine degree in 1987 at the Free University, Berlin, Germany, and went on to become certified as a specialist in rheumatology, internal medicine, laboratory medicine, physical therapy, and sports medicine. In 2000, he became Professor of Rheumatology at the Free University, Berlin. The following year he became Medical Director of the Rheumatology Medical Centre, Ruhrgebiet in Herne, one of the major hospitals in Germany specialized in the management of patients with rheumatic diseases, a position he still holds.

Professor Braun has been an invited speaker at a number of universities and institutions including the National Institutes of Health, the American College of Rheumatology, the European League Against Rheumatism (EULAR), and the Asia Pacific League of Associations for Rheumatology. He has also been invited to speak about his research at the national meetings of the British, Irish, Indian, Scandinavian, Danish, Dutch, Belgian, Italian, Spanish, Greek, Turkish, Moroccan, Russian, Chinese, and German Society of Rheumatology. In 2004, he was appointed as the inaugural Robert Inman lecturer at the University of Toronto, Canada.

Professor Braun has been the recipient of several prestigious awards, including the Ankylosing Spondylitis Patients Association Award in 1996, the Tosse-Research Award in Pediatric Rheumatology in 1998, the Carol-Nachman Research Award in 2000, and the EULAR prize in 2003.

As one of the leading specialists in the field of the spondyloarthritides, Professor Braun has published more than 300 papers on different aspects of this subject. He is a member of the Steering Committee of the Assessments in Ankylosing Spondylitis Working group and the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis.

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Abbreviations

AS	ankylosing spondylitis
ASAS	Assessment in SpondyloArthritis international Society
ASDAS	Ankylosing Spondylitis Disease Activity Score
axSpA	axial spondyloarthritis
BASDAI	Bath Ankylosing Spondylitis Disease Activity Index
BASMI	Bath Ankylosing Spondylitis Metrology Index
BASFI	Bath Ankylosing Spondylitis Functional Index
CRP	C-reactive protein
CT	computed tomography
DISH	diffuse idiopathic skeletal hyperostosis
DMARD	disease-modifying antirheumatic drug
ESR	erythrocyte sedimentation rate
ESSG	European Spondyloarthropathy Study Group
EULAR	European League Against Rheumatism
HLA	human leukocyte antigen
IBD	inflammatory bowel disease
IBP	inflammatory back pain
IL	interleukin
LR	likelihood ratio
MASES	Maastricht Ankylosing Spondylitis Enthesitis Score
MRI	magnetic resonance imaging
NRS	numerical rating scale
nr-axSpA	nonradiographic axial spondyloarthritis
NSAID	nonsteroidal anti-inflammatory drug
SI	sacroiliac
SpA	spondyloarthritis
STIR	short tau inversion recovery
TB	tuberculosis
Th-17	T-helper cell 17
TNF	tumor necrosis factor
VAS	visual analogue scale

Introduction

The term axial spondyloarthritis (axSpA) covers both patients who already have radiographic changes in the sacroiliac joints (radiographic sacroiliitis, ankylosing spondylitis [AS]) and patients who do not have such changes; this subgroup is now called nonradiographic axSpA (nr-axSpA). AxSpA is more common in men than in women in case of established AS while in case of nr-axSpA there may even be a slight female predominance. AxSpA is a chronic inflammatory disease which, probably as a result of an autoimmune process, causes inflammation in sacroiliac joints, vertebrae, and adjacent joints. Patients also frequently have inflammation of entheses (insertions of tendons or ligaments into bone), the peripheral joints, and the eye. Next to axial inflammation the phenomenon of new bone formation is pathognomonic for axSpA and especially AS. In severe cases fusion of vertebral bodies to the so-called bamboo spine is observed. Both inflammation and new bone formation may significantly impact patients' mobility and function. In AS, other organs, such as heart valves, kidneys, and lungs, are only rarely affected. The onset of symptoms – notably back pain and stiffness – occurs often already in adolescence or early adulthood. To date, the disease has no cure, but medical and physical therapy may improve pain, inflammation, and other symptoms considerably; indeed, even remission has now become a realistic goal. A major breakthrough in the treatment of this disease, next to the efficacy of nonsteroidal anti-inflammatory drugs (NSAID), was the demonstration of the partly impressive efficacy of tumor necrosis factor (TNF)-blocking agents [1].