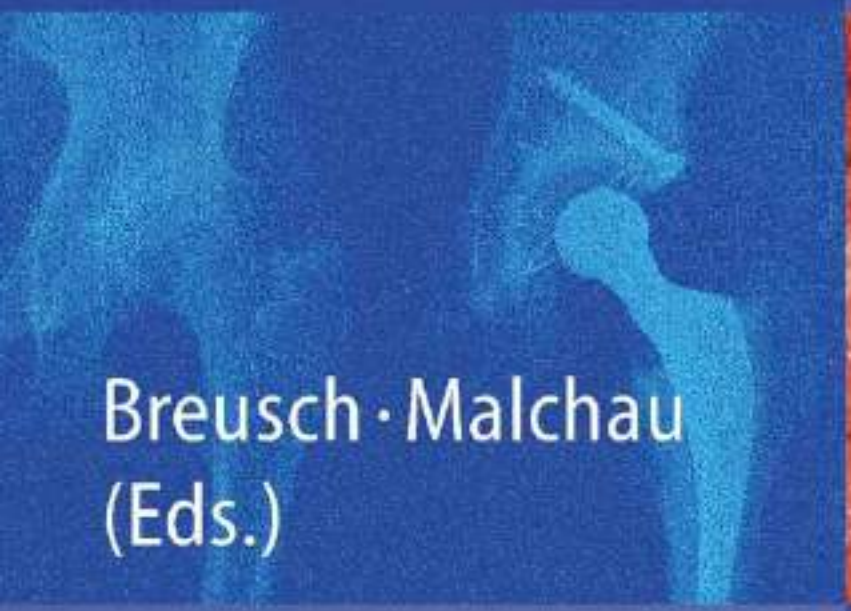
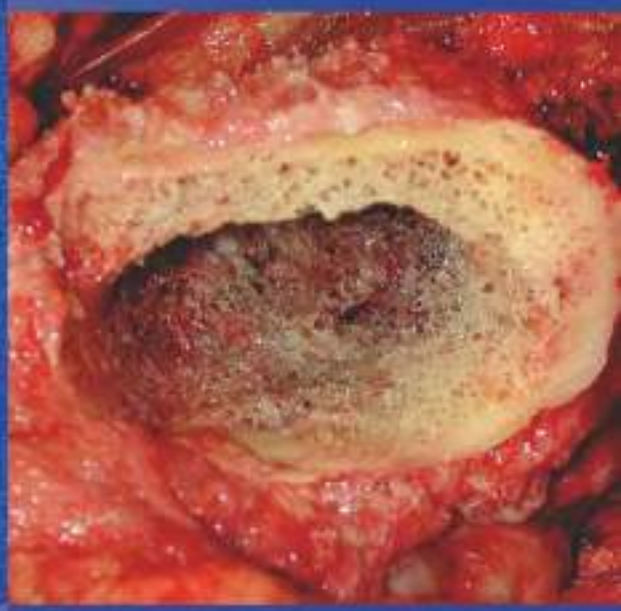


Breusch · Malchau
(Eds.)



The Well-Cemented Total Hip Arthroplasty

Theory and Practice

Springer

Steffen J. Breusch (Editor)
Henrik Malchau (Editor)

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Theory and Practice

With 521 Figures and 61 Tables

Springer

Breusch, Steffen
M.D., PhD., FRCS Ed
Consultant Orthopaedic Surgeon
Part-time Senior Lecturer
Orthopaedic Department
University of Edinburgh
New Royal Infirmary, Little France
Edinburgh, EH16 4SU
UNITED KINGDOM

Malchau, Henrik
M.D., PhD.
Professor (vis.) at Harvard Medical School,
Co-director:
Orthopaedic Biomechanics and Biomaterials Laboratory
Staff physician,
Adult Reconstructive Unit, Orthopedic Department
Massachusetts General Hospital
55 Fruit Street, GRJ 1126
Boston, Massachusetts 02114-2696
USA

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Forewords

In the forty-six years since Sir John Charnley first advanced his a revolutionary concept of a totally artificial hip joint consisting of a metal-to-plastic articulation, literally millions of people have had their lives dramatically and remarkably improved by this seminal innovation.

His brilliance in concept reached successful conclusions only through his relentless dedication, coupled with his outstanding application of his far-ranging commitment to the science and engineering of the issue.

These very unique features of his work were equally matched by his extraordinary persistence. It is interesting to assess, forty-six years later, how close to the mark he was and is. If success is to be measured as standing the test of time, he is exemplary.

Thousands of others have poured these ideas, efforts and experience into this vessel. Understandings have improved and new insights now abound, to augment Charnley's original ideas. It is time, therefore, for a major comprehensive assessment of this entire field of cemented total hip arthroplasty by a broadly based, highly selected group of rigorous scientists and clinicians who have specific skills and knowledge in the multiple aspects of progress in the field.

Such is this book. It is unprecedented in scope, timeliness and quality. It is, indeed, a serious, in depth compilation of the 2005 »state of the art«.

W.H. Harris
Boston, USA

»The surgeon who is less experienced and trained in total joint arthroplasty should predominantly use cement for implant fixation. It is more forgiving and it may be better compensating for insufficient preparation technique«. Surprisingly, it is not long ago, that this opinion was found in many orthopaedic centres. It is based on a fundamental misunderstanding that cement should be used to fill up defects and it ignores all the basics of cemented implant fixation technique, which has been extensively studied and published by Sir John Charnley and other dedicated orthopaedic surgeons. However, many users of cemented total hip replacement are not aware of this fund of well-established knowledge and the status of ongoing research in this field. The same is true for the results of the Swedish and other Scandinavian hip registers. They have clearly demonstrated the benefits of modern cementing technique. However, in many countries as well as many orthopaedic centres the use of modern cementing technique is far from being comprehensive. Limited financial resources are often given as reason. This seems to be an extremely short-sighted way of calculation. Quality in total joint replacement is primarily defined by implant survival. Based on that, a well-cemented total hip arthroplasty remains the golden standard. It is thanks to the editors and contributors of this book that we may learn and understand all about »well-cemented total hip arthroplasty«.

The orthopaedic surgeon, who wants to know, may read the book. The one, who already knows, may also read the book – he will recognise that he did not know everything. The one, who does not want to know, should not read the book – he should also not perform cemented total hip arthroplasty.

V. Ewerbeck
Heidelberg, Germany

Preface

Sir John Charnley stated in his book »Acrylic Cement in Orthopaedic Surgery« (Longman Group Limited, 1970):

»*There is no doubt that in orthopaedic surgery acrylic cement is going to be widely used in many different parts of the world; there is equally no doubt that its use by uninformed operators will produce complications which might seriously threaten its reputation and might hold back the progress of science. If criticism of acrylic cement are to come from this type of source, it is important to have available the main references to research in this field, both in favour of and against the main thesis*«.

»The Well-Cemented Total Hip Arthroplasty – Theory and Practice« is a contemporary and complete source for the orthopaedic surgeon, fellow or resident performing total hip arthroplasty or other professional groups involved in the treatment of patients operated upon with a total hip.

The content covers topics from clinical aspects such as type of incision, the operative steps in the cementing technique, optimal implant designs, perioperative management and prevention of complications. The basic science aspects include properties of bone cement, mixing and bone preparation. The clinical outcome with different types of implant design is also covered and based on both individual surgeons experience as well as the Scandinavian registries.

We are pleased that today's leading experts, both preclinical and clinical, have contributed with their expertise. The intention from the editors has been to cover as many aspects as possible around the cemented total hip arthroplasty and as broadly as possible. The authors list covers 9 different countries and hopefully a balanced view in the different topics.

It is our hope that the textbook will be informative and serve the clinicians and therefore also improve the clinical results in the coming years.

Summer 2005
Henrik Malchau
Steffen Breusch

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List of Contributors

Editors

Breusch, Steffen
M.D., PhD., FRCS Ed
Consultant Orthopaedic Surgeon
Part-time Senior Lecturer
Orthopaedic Department
University of Edinburgh
New Royal Infirmary, Little France
Edinburgh, EH16 4SU
UNITED KINGDOM

Malchau, Henrik
M.D., PhD.
Professor (vis.) at Harvard Medical School,
Co-director:
Orthopaedic Biomechanics and Biomaterials Laboratory
Staff physician,
Adult Reconstructive Unit,
Orthopedic Department
Massachusetts General Hospital
55 Fruit Street, GRJ 1126
Boston, Massachusetts 02114-2696
USA

Authors

Berend, Keith R.
M.D.
Joint Implant Surgeons, Inc.
New Albany Surgical Hospital
Clinical Assistant Professor
Dept. of Orthopaedics
The Ohio State University
720 East Broad Street
Columbus, Ohio 43215
USA

Breusch, Steffen
M.D., PhD., FRCS Ed
Consultant Orthopaedic Surgeon
Part-time Senior Lecturer
Orthopaedic Department
University of Edinburgh
New Royal Infirmary, Little France
Edinburgh, EH16 4SU
UNITED KINGDOM

Clarius, Michael
Dr. med.
Oberarzt
Stiftung Orthopädische Universitätsklinik Heidelberg
Schlierbacher Landstr. 200 A
69118 Heidelberg
GERMANY

Clauss, Martin
Dr. med.
Assistenzarzt
Rheinstrasse 26
Kantonsspital Liestal
4410 Liestal
SWITZERLAND

Daniels, A.U. Dan
Professor, PhD.
Laboratory for Orthopaedic Biomechanics (LOB)
University of Basel
Felix-Platter-Spital
Burgfelderstr. 101
4055 Basel
SWITZERLAND

Dow, Alasdair
MB ChB, MRCP, FRCA
Consultant in Intensive Care and Anaesthesia
Department of Anaesthetics
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital Foundation Trust
Barrack Road
Exeter, Devon, EX2 5DW
UNITED KINGDOM

Draenert, Klaus
Professor Dr. med.
Leiter des Zentrum für Orthopädische Wissenschaften
Gabriel-Max-Str. 3
81545 München
GERMANY

Draenert, Yvette
Dr. med.
Zentrum für Orthopädische Wissenschaften
Gabriel-Max-Str. 3
81545 München
GERMANY

Espehaug, Brigitte
M.Sc., PhD.
Statistician
The Norwegian Arthroplasty Register
Department of Orthopaedic Surgery
Haukeland University Hospital
5021 Bergen
NORWAY

Ewerbeck, Volker
Professor Dr. med.
Direktor der Abteilung Orthopädie I
Vorsitzender des Vorstandes
Stiftung Orthopädische Universitätsklinik Heidelberg
Schlierbacher Landstraße 200a
69118 Heidelberg
GERMANY

Fleming, Patricia A.
Research Assistant
The John Charnley Research Institute
Wrightington Hospital, Hip Center
Hall Lane, Appley Bridge
Wrightington Wigan, WN6 9EP
UNITED KINGDOM

von Foerster, Götz
Dr. med.
Departmentleitung Hüftendoprothetik
Endo-Klinik Hamburg
Holstenstr. 2
22767 Hamburg
GERMANY

Freeman, Michael
Professor, BA, MB BCh, MD, FRCS
Visiting Professor
University College London
Honorary Consultant Orthopaedic Surgeon
Royal London Hospital
Whitechapel
London E1 1BB
UNITED KINGDOM

Frommelt, Lars
Dr. med.
Endo-Klinik Hamburg
Holstenstr. 2
22767 Hamburg
GERMANY

Furnes, Ove N.
M.D., PhD.
Orthopaedic Surgeon
Head of the Norwegian Arthroplasty Register
Department of Orthopaedic Surgery
Haukeland University Hospital
5021 Bergen
NORWAY

Garellick, Göran
M.D., PhD.
Joint Replacement Unit
Orthopaedic Department
Sahlgrenska University Hospital
413 45 Göteborg
SWEDEN

Gehrke, Thorsten
Dr. med.
Leiter des Hüftdepartments
Ärztlicher Direktor
Endo-Klinik Hamburg
Holstenstr. 2
22767 Hamburg
GERMANY

Geller, Jeffrey A.
M.D.
Assistant Professor
Orthopaedic Surgery
Columbia University College of Physicians and Surgeons
622 West 168th Street, PH 11
New York, New York 10032
USA

Gie, Graham A.
MB BS, FRCS Ed (Orth)
Consultant Orthopaedic Surgeon
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital
Barrack Road
Exeter, Devon, EX2 5DW
UNITED KINGDOM

Grappiolo, G.
M.D.
Hip Surgery Unit
Santa Corona Hospital
Via XXV Aprile 128 - 17027
Pietra Ligure (SV)
ITALY

Harris, William H.
Professor, M.D.
Director Emeritus of Orthopaedics, Biomechanics and Biomaterials Laboratory
Massachusetts General Hospital
55 Fruit Street
Boston, MA, GRJ-1126
USA

Havelin, Leif I.
M.D., PhD.
Professor, Head of Department of Orthopaedic Surgery
Haukeland University Hospital
5021 Bergen
NORWAY

Heisel, Christian
Dr. med.
Stiftung Orthopädische Universitätsklinik Heidelberg
Schlierbacher Landstr. 200a
69118 Heidelberg
GERMANY

Herberts, Peter
M.D., PhD.,
Professor Emeritus,
Orthopaedic Department
Sahlgrenska University Hospital
413 45 Göteborg
SWEDEN

Howell, Jonathan R.
MB BS, MSc, FRCS (Tr&Orth)
Consultant Orthopaedic Surgeon
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital
Barrack Road
Exeter, Devon, EX2 5DW
UNITED KINGDOM

Howie, Colin
B.Sc., MB ChB, FRCS Orth
Consultant Orthopaedic Surgeon
Orthopaedic Department
University of Edinburgh
New Royal Infirmary, Little France
Edinburgh, EH16 4SU
UNITED KINGDOM

Hubble, Matthew J.W.
MB BS, FRCSI, FRCS (Tr&Orth)
Consultant Orthopaedic Surgeon
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital
Barrack Road
Exeter, Devon, EX2 5DW
UNITED KINGDOM

Kärrholm, Johan
Professor, MD, PhD.
Orthopaedic Department
Sahlgrenska University Hospital
413 45 Göteborg
SWEDEN

Kerboull, Marcel
Professor, M.D.
Institut Marcel Kerboull
39 Rue Buffon
75005 Paris
FRANCE

Kühn, Klaus-Dieter
Dr. rer. nat (D. Sc)
Heraeus-Kulzer GmbH
Philipp-Reis-Str. 8-13
61273 Wehrheim
GERMANY

Lee, Christoph
Dr. med.
Stiftung Orthopädische Universitäts-klinik Heidelberg
Schlierbacher Landstrasse 200a
69118 Heidelberg
GERMANY

Lee, Clive, A.J.
BSc, PhD., CEng, MIPEM, FRSA
Honorary University Fellow,
University of Exeter
Honorary Consultant Clinical Scientist,
Royal Devon and Exeter Hospital
Department of Engineering,
Computer Science and Mathematics,
University of Exeter
Harrison Building
North Park Road
Exeter, EX4 4QF
UNITED KINGDOM

Ling, Robin S.M.
Professor, OBE, MA, BM (Oxon),
Hon. FRCS Ed, FRCS
Consultant Orthopaedic Surgeon
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital
Barrack Road
Exeter, Devon, EX2 5DW
UNITED KINGDOM

Lombardi, Adolph V. Jr.
M.D., FACS
Joint Implant Surgeons, Inc.
President-Elect, Medical Staff Services
New Albany Surgical Hospital
Clinical Assistant Professor
Dept. of Orthopaedics and
Dept. of Biomedical Engineering
The Ohio State University
720 East Broad Street
Columbus, Ohio 43215
USA

Lukoschek, Martin
Professor Dr. med.
Vincentius AG
Orthopädische Klinik
Untere Laube 2
78462 Konstanz
GERMANY

Malchau, Henrik
M.D., PhD.
Professor (vis.) at Harvard Medical School,
Co-director:
Orthopaedic Biomechanics
and Biomaterials Laboratory
Staff physician,
Adult Reconstructive Unit,
Orthopedic Department
Massachusetts General Hospital
55 Fruit Street, GRJ 1126
Boston, Massachusetts 02114-2696
USA

Mallory, Thomas H.
M.D., FACS
Joint Implant Surgeons, Inc.
New Albany Surgical Hospital
Clinical Professor
Dept. of Orthopaedics
The Ohio State University
720 East Broad Street
Columbus, Ohio 43215
USA

McCaskie, Andrew W.
M.D., FRCS
Professor of Trauma and Orthopaedic Surgery
University of Newcastle upon Tyne,
The Freeman Hospital, High Heaton,
Newcastle upon Tyne, NE7 7DN
UNITED KINGDOM

Morscher, Erwin
Professor em. Dr. med.
former Chairman of the Dept. of Orthopaedic Surgery of the University of Basel
Laboratory for Orthopaedic Biomechanics (LOB)
Felix-Platter-Spital
Burgfelderstr. 101
CH-4012 Basel
SWITZERLAND

New, Andrew
BEng, PhD., AMIMechE
Bioengineering Science Research Group
School of Engineering Sciences
University of Southampton
Southampton, SO17 1BJ
UNITED KINGDOM

Older, John
MB BS, BDS, FRCS, FRCS Ed
Consultant Orthopaedic Surgeon,
King Edward VII Hospital, Midhurst
West Sussex GU29 0BL
UNITED KINGDOM

Ostendorf, Marieke
M.D., PhD.
Dept. of Orthopaedics
University Medical Center Utrecht
P.O.Box. 85500
3508 GA Utrecht
THE NETHERLANDS

Parsch, Dominik
Priv.-Doz. Dr. med.
Leitender Oberarzt
Stiftung Orthopädische Universitäts-klinik Heidelberg
Schlierbacher Landstr. 200a
69118 Heidelberg
GERMANY

Schmalzried, Thomas P.
M.D.
Associate Medical Director
Joint Replacement Institute at
Orthopaedic Hospital
2400 South Flower Street
Los Angeles, CA, 90007
USA

Schneider, Michael
Dr. med
Department of Traumatology
Katholisches Klinikum Mainz
St. Vincenz- and Elisabeth Hospital
An der Goldgrube 11
55131 Mainz
GERMANY

Scott, Gareth
MB BS, FRCS
Royal London Hospital
Whitechapel
London E1 1BB
UNITED KINGDOM

Silva, Mauricio
M.D.
Visiting Assistant Professor
UCLA / Orthopaedic Hospital
Department of Orthopaedics
David Geffen School of Medicine
University of California Los Angeles
Los Angeles, CA, 9007
USA

Simpson, Philip M.S.
BSc Hons, MB ChB, MRCS Ed
Orthopaedic Registrar
Orthopaedic Department
University of Edinburgh
New Royal Infirmary, Little France
Edinburgh, EH16 4SU
UNITED KINGDOM

Siney, Paul D.
BA
The John Charnley Research Insitute
Wrightington Hospital, Hip Center
Hall Lane, Appley Bridge
Wrightington Wigan, WN6 9EP
UNITED KINGDOM

Singh, Gyanendra
MS (Orth), FRCS, M.Ch. (Orth)
Trust Registrar
Orthopaedic Department
St. Richard's Hospital
Spitalfield Lane
Chichester, West Sussex PO19 6SE
UNITED KINGDOM

Spierings, Pieter T.J.
M.D., MSc.
Spierings Medische Techniek B.V.
Madoerastraat 24
6524 LH Nijmegen
THE NETHERLANDS

Taylor, Lee J.
MB, FRCS
Consultant Orthopaedic Surgeon
Orthopaedic Department
St. Richard's Hospital
Spitalfield Lane
Chichester, West Sussex PO19 6SE
UNITED KINGDOM

Thomsen, Marc
Priv.-Doz. Dr. med.
Leitender Oberarzt
Stiftung Orthopädische Universitäts-
klinik Heidelberg
Schlierbacher Landstr. 200a
69118 Heidelberg
GERMANY

Timperley, A. John
MB ChB, FRCS Ed
Princess Elizabeth Orthopaedic Centre
Royal Devon and Exeter Hospital
Wonford Road
Exeter, EX2 5DW
UNITED KINGDOM

Verdonschot, Nico
PhD.
Orthopaedic Research Laboratory
Radboud University Nijmegen
Medical Centre
Theodoor Craanenlaan 7 P.O. Box 9101
6500 HB Nijmegen
THE NETHERLANDS

Wang, Jian-Sheng
M.D., PhD.
Dept. of Orthopedics
Lund University Hospital
221 85 Lund
SWEDEN

Wirz, Dieter
M.D.
Laboratory for Orthopaedic
Biomechanics (LOB)
University of Basel
Felix-Platter-Spital
Burgfelderstr. 101
4055 Basel
SWITZERLAND

Wroblewski, Michael B.
Professor, MD, FRCS
The John Charnley Research Institute
Wrightington Hospital, Hip Center
Hall Lane, Appley Bridge
Wrightington Wigan, WN6 9EP
UNITED KINGDOM