



Universiteit
Leiden
The Netherlands

Improving outcomes after total hip arthroplasty: the impact of patient factors, surgical approach & implant design

Beers, L.W.A.H. van

Citation

Beers, L. W. A. H. van. (2024, March 12). *Improving outcomes after total hip arthroplasty: the impact of patient factors, surgical approach & implant design*. Retrieved from <https://hdl.handle.net/1887/3721743>

Version: Publisher's Version

[Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

License: <https://hdl.handle.net/1887/3721743>

Note: To cite this publication please use the final published version (if applicable).

Improving outcomes after total hip arthroplasty

*The impact of patient factors, surgical
approach & implant design*

Loes W.A.H. van Beers

Lay-out: Wendy Bour-van Telgen

Printed: Ipkamp Printing

ISBN: 978-94-6473-401-0

The publication of this thesis was kindly supported by:

Stichting Wetenschap OLVG, Nederlandse Orthopaedische Vereniging, Link Lima Nederland,
Annafonds|NOREF, Maatschap Orthopedie St. Antonius Ziekenhuis.

Copyright © 2024 Loes van Beers

All rights reserved. No parts of this dissertation may be reproduced, stored, or transmitted in any form or by any means without written permission of the author.

Improving outcomes after total hip arthroplasty

The impact of patient factors, surgical approach & implant design

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl
volgens besluit van het college voor promoties
te verdedigen op dinsdag 12 maart 2024
klokke 15.00 uur

door

Loes Wilhelmina Antonia Helena van Beers
geboren te Oostelbeers
in 1986

Promotor: Prof. dr. R.W. Poolman

Copromotoren: Dr. N.W. Willigenburg, OLVG, Amsterdam
Dr. B.C.H. van der Wal, UMC Utrecht, Utrecht

Promotiecommissie: Prof. dr. R.G.H.H. Nelissen
Prof. dr. T.P.M. Vliet Vlieland
Prof. dr. J. Harlaar
Dr. D.J.F. Moojen, OLVG, Amsterdam
Dr. W. van der Weegen, Anna Ziekenhuis, Geldrop

TABLE OF CONTENTS

Chapter 1	General introduction	9
PART 1	The influence of <i>patient factors</i> on outcomes after total hip arthroplasty.	
Chapter 2	Predictors of physical functioning after total hip arthroplasty: a systematic review.	23
Chapter 3	Functional outcome of uncemented total hip replacement: development of a multivariable prediction model.	61
PART 2	The influence of <i>surgical approach</i> on outcomes after hip arthroplasty.	
Chapter 4	Posterolateral or direct lateral approach for hemiarthroplasty after femoral neck fractures: a systematic review.	79
Chapter 5	Similar Superior Patient Reported Outcome Measures (PROMs) for anterior and posterolateral approach after total hip arthroplasty.	105
PART 3	The influence of <i>implant design</i> on outcomes after total hip arthroplasty.	
Chapter 6	Curved versus Straight Stem Uncemented Total Hip Arthroplasty Osteoarthritis Multicenter trial (CUSTOM): Design of a prospective blinded randomised controlled multicentre trial.	131
Chapter 7	Short versus conventional straight stem in uncemented total hip arthroplasty: functional outcomes up to 5 years and survival up to 12 years: secondary results of a randomized controlled trial.	147

Chapter 8	Can dual mobility cups prevent dislocation in primary total hip arthroplasty? A systematic review.	173
Chapter 9	Effectiveness of dual-mobility cups for preventing dislocation after primary total hip arthroplasty compared to unipolar cups in elderly patients: design of a randomized controlled trial nested in the Dutch Arthroplasty Registry.	195
Chapter 10	General discussion	209
Chapter 11	Summary of this thesis	222
	Dutch summary (Nederlandse samenvatting)	224
Chapter 12	List of publications	230
	Acknowledgement (Dankwoord)	234
	Curriculum Vitae	236

