Effects of vaginal prolapse surgery and ageing on vaginal vascularization
Weber, M.A.

Citation for published version (APA):
Weber, M. A. (2016). Effects of vaginal prolapse surgery and ageing on vaginal vascularization

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (http://dare.uva.nl)
Objective of this thesis was to assess the effects of vaginal prolapse surgery on vaginal vasocongestion and vaginal vascularization. The first objective was to establish the effects of vaginal prolapse surgery on vaginal vasocongestion and vaginal vascularization. The second objective was to evaluate if the assessment of vaginal atrophy (VA) could provide a useful additional diagnostic tool for female patients. The third objective was to determine if the use of synthetic mesh caused a different sensation of the vagina after surgery. Our current objective was to describe the vaginal microcirculation by assessing vaginal microvascular morphology, capillary density, and microvascular density. We hypothesized that the vagina is an important organ tissue. However, vaginal microvascular morphology, capillary density, and microvascular density are difficult to assess due to the small size of the microvasculature. We aim to provide an evidence-based definition of VA and present an overview of subjective and objective measurements of VA applicable in clinical practice and research. As subjective outcome measurements, specific symptoms of which are treated with topical oestrogens. Two important contributions were identified and also regarding objective outcome measurements.

Effects of vaginal prolapse surgery and ageing on vaginal vascularization

Maaike Weber

Via uitnodiging voor het bijwonen van de openbare verdediging van het proefschrift: Effects of vaginal prolapse surgery and ageing on vaginal vascularization

doctor Maaike Weber

op woensdag 22 juni 2016
om 10.00 uur

Agnietenkapel
Oudezijds Voorburgwal
229-231
1012 EZ Amsterdam

Receptie na afloop

Paraminfen:
Chantal Diedrich
(paulien.kuijer@gmail.com)

Paulien Kuijer
(paulien.kuijer@gmail.com)

Auteur:
Maaike Weber
Uithoornstraat 47-2
1078 SV Amsterdam
m.a.weber85@gmail.com
06-43752753
Effects of vaginal prolapse surgery and ageing on vaginal vascularization

M.A. Weber
Effects of vaginal prolapse surgery and ageing on vaginal vascularization

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. D.C. van den Boom
ten overstaan van een door het college voor promoties
ingestelde commissie,
in het openbaar te verdedigen in de Agnietenkapel
op woensdag 22 juni 2016, te 10.00 uur

door

Margaret Anne Weber

geboren te Utrecht
Promotiecommissie

Promotores:  
Prof. dr. J.P.W.R. Roovers  Universiteit van Amsterdam  
Prof. dr. M.J. Heineman  Universiteit van Amsterdam

Co-promotor:  
Prof. dr. ir. C. Ince  Universiteit van Amsterdam

Overige leden:  
Prof. dr. G.G. Kenter  Universiteit van Amsterdam  
Prof. dr. J.J.M.C.H. de la Rosette  Universiteit van Amsterdam  
Dr. E.T.M. Laan  Universiteit van Amsterdam  
Prof. dr. ir. T.H. Smit  Vrije Universiteit Amsterdam  
Prof. dr. H.A.M. Brölmann  Vrije Universiteit Amsterdam

Faculteit der Geneeskunde
Promotiecommissie

Promotores:
Prof. dr. J.P.W.R. Roovers
Universiteit van Amsterdam
Prof. dr. M.J. Heineman
Universiteit van Amsterdam

Co-promotor:
Prof. dr. ir. C. Ince
Universiteit van Amsterdam

Overige leden:
Prof. dr. G.G. Kenter
Universiteit van Amsterdam
Prof. dr. J.J.M.C.H. de la Rosette
Universiteit van Amsterdam
Dr. E.T.M. Laan
Universiteit van Amsterdam
Prof. dr. ir. T.H. Smit
Vrije Universiteit Amsterdam
Prof. dr. H. A.M. Brölmann
Vrije Universiteit Amsterdam

Faculteit der Geneeskunde

Voor mijn ouders
Contents

Chapter 1    General introduction 9

PART 1: EFFECTS OF VAGINAL PROLAPSE AND VAGINAL PROLAPSE SURGERY ON VAGINAL VASCULARIZATION

Chapter 2    The effects of vaginal prolapse surgery using synthetic mesh on vaginal wall sensibility, vaginal vasocongestion, and sexual function: a prospective single-center study 23

Chapter 3    Vaginal microcirculation: non-invasive anatomical examination of the micro-vessel architecture, tortuosity and capillary density 41

Chapter 4    Is pelvic organ prolapse associated with altered microcirculation of the vaginal wall? 61

PART 2: EFFECTS OF AGEING AND LOCAL OESTROGENS ON PELVIC FLOOR DISORDERS

Chapter 5    Assessment of vaginal atrophy: a review 83

Chapter 6    Focal depth measurements of the vaginal wall: a new method to non-invasively quantify vaginal wall thickness in the diagnosis and treatment of vaginal atrophy 119

Chapter 7    Local oestrogen for pelvic floor disorders: a systematic review 135

Chapter 8    The effect of vaginal oestradiol cream on subjective and objective symptoms of stress urinary incontinence and vaginal atrophy: an international multi-center pilot study 207

Chapter 9    General discussion 227

Chapter 10   Summary and conclusions 239

Chapter 11   Samenvatting en conclusies 249

Appendices   List of co-authors and affiliations 261
              List of publications 265
              PhD portfolio 267
              Curriculum Vitae 271
              Dankwoord 273