

University of Groningen

## The Genito-Pelvic Pain/Penetration Disorder Paradigm and Beyond

Spoelstra, Symen Kornelis

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*  
2017

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Spoelstra, S. K. (2017). *The Genito-Pelvic Pain/Penetration Disorder Paradigm and Beyond: Theoretical and empirical perspectives*. [Thesis fully internal (DIV), University of Groningen]. Rijksuniversiteit Groningen.

### Copyright

Other than for strictly personal use, 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), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

# **The Genito-Pelvic Pain/Penetration Disorder Paradigm and Beyond**

Theoretical and empirical perspectives

---

**Symen Kornelis Spoelstra**

Printing of the thesis was financially supported by: University of Groningen, University Medical Center Groningen (UMCG), Ahmas Foundation Groningen

Cover image: Ollyy | [www.shutterstock.com](http://www.shutterstock.com)

Lay-out: Nikki Vermeulen | Ridderprint BV

Printing:  **RIDDERPRINT** | [www.ridderprint.nl](http://www.ridderprint.nl)

ISBN: 978-94-6299-520-8

© 2017 Symen Kornelis Spoelstra

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission of the author and the publisher holding the copyright of the published articles.



rijksuniversiteit  
 groningen

# **The Genito-Pelvic Pain/Penetration Disorder Paradigm and Beyond**

Theoretical and empirical perspectives

## **Proefschrift**

ter verkrijging van de graad van doctor aan de  
Rijksuniversiteit Groningen  
op gezag van de  
rector magnificus prof. dr. E. Sterken  
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

woensdag 22 februari 2017 om 16.15 uur

door

**Symen Kornelis Spoelstra**  
geboren op 21 november 1979  
te Leeuwarden

## **Promotores**

Prof. dr. W.C.M. Weijmar Schultz

Prof. dr. H.B.M. van de Wiel

## **Beoordelingscommissie**

Prof. dr. R. Basson

Prof. dr. H.W. Nijman

Prof. dr. M.D. Waldinger

## **Paranimfen**

Dr. C. Borg

Dr. E.R. Nijhuis

*"Het doet het mysterie geen kwaad er een beetje meer van te weten"*

Richard Feynman, 1918-1988

## TABLE OF CONTENTS

### SCOPE OF THE THESIS

<b>Chapter 01</b>	General introduction A woman with coital pain: new perspectives on provoked vestibulodynia <i>Accepted for publication as a chapter in the book Bio-Psycho-Social-Obstetrics and Gynaecology</i>	13
-------------------	--	----

### PART I TREATMENT

<b>Chapter 02</b>	Anticonvulsant pharmacotherapy in generalized and localized vulvodynia; a critical review of the literature <i>J Psychosom Obstet Gynecol 2013;34(3):133-138</i>	39
-------------------	---	----

<b>Chapter 03</b>	Long-term results of an individualized, multifaceted and multidisciplinary therapeutic approach to provoked vestibulodynia <i>J Sex Med 2011;8(2):489-496</i>	53
-------------------	--	----

<b>Chapter 04</b>	Transcutaneous electric nerve stimulation as an additional treatment for women suffering from therapy-resistant provoked vestibulodynia: a feasibility study <i>J Sex Med 2015;12(1):228-237</i>	69
-------------------	---	----

### PART II PATHOPHYSIOLOGY

<b>Chapter 05</b>	Female genito-pelvic reflexes and their sexual implications: an overview <i>Submitted for publication</i>	89
-------------------	--	----

<b>Chapter 06</b>	Dynamic clinical measurements of voluntary vaginal contractions and autonomic vaginal reflexes <i>J Sex Med 2014;11(12):2966-2975</i>	107
-------------------	--	-----

<b>Chapter 07</b>	The distinct impact of voluntary- and autonomic pelvic floor muscles on genito-pelvic pain/penetration disorder <i>Submitted for publication</i>	125
-------------------	---	-----

## **PART III REFLECTION**

<b>Chapter 08</b>	Throwing the baby out with the bathwater: the demise of vaginismus in favor of genito-pelvic pain/penetration disorder <i>Arch Sex Behav 2014;43(7):1209-13</i>	141
-------------------	--	-----

## **PART VI CONCLUSION**

<b>Chapter 09</b>	Summarizing discussion and future perspectives	155
-------------------	--	-----

<b>Chapter 10</b>	Nederlandse samenvatting	167
-------------------	--------------------------	-----

## **PART V APPENDICES**

A.	List of abbreviations	183
B.	Co-authors and their affiliations	187
C.	Dankwoord (acknowledgements)	191
D.	Curriculum Vitae	199
E.	Publication overview	203





# SCOPE OF THE THESIS





This thesis focuses on two female sexual pain disorders: vaginismus and dyspareunia. In the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) these two disorders have been merged into a new 'diagnosis': Genito-Pelvic Pain/Penetration Disorder (GPPPD).

We place the term diagnosis between inverted commas for several reasons:

- The DSM does not provide 'diagnoses' in the normal nosological manner. It clusters and categorizes symptoms, but does not describe the etiology in terms of underlying pathophysiology;
- Merging of the disorders gives the impression that vaginismus and dyspareunia are identical. Although it is generally believed that these two phenomena lie on a phenotypical continuum, there is much debate concerning the differentiation of the underlying pathology;
- As a consequence of the different etiological views - and therefore the lack of a formal diagnosis - a broad spectrum of treatment modalities has emerged, many of which represent a certain school (medical, psychological, psychosomatic, etc.) each with its own '*claim for fame*'. Although these form very interesting subjects for scientific debate, this situation has a paralysing effect on painstaking clinicians who want to provide treatment which they can account for to their patients.

In order to evaluate the clinical management of provoked vestibulodynia (PVD) and to gain more insight into the pathology of vaginismus and dyspareunia, this research project was launched. To emphasize the importance of establishing sound etiological bases for medical professionals, we took the scientist practitioner stance: '*building the bridge from two sides*' and '*on-the-job-experience*'.

## AIMS

- To evaluate the clinical management of provoked vestibulodynia
- To gain more insight into the pathophysiology of vaginismus and dyspareunia, in casu, explore the role of genito-pelvic reflexes
- To discuss the new DSM-5 classification genito-pelvic pain/penetration disorder

## OUTLINE OF THE THESIS

**Chapter 1** describes the symptoms, aetiology, pathogenesis, differential diagnosis and treatment of provoked vestibulodynia based on the case history of a young woman with provoked vestibulodynia.

**Chapter 2** provides an overview of the efficacy of anticonvulsant pharmacotherapy for generalized and localized vulvodynia. Relevant studies were evaluated with the Oxford Centre for Evidence-Based Medicine – levels of evidence.

**Chapter 3** presents the long-term results of an individualized, multifaceted and multidisciplinary therapeutic approach to vulvar pain, sexual functioning, sexually related personal distress and relational sexual satisfaction in women with provoked vestibulodynia.

**Chapter 4** evaluates the additional value of transcutaneous electric nerve stimulation (TENS) to the multidimensional treatment for provoked vestibulodynia.

**Chapter 5** describes the state of the art on female genito-pelvic sexual reflexes. A literature search provided insight into genito-pelvic reflexes and their assumed sexual implications.

**Chapter 6** demonstrates dynamic clinical measurements of voluntary vaginal contractions and induced autonomic vaginal reflexes in asymptomatic women.

**Chapter 7** presents the genito-pelvic reflex hypothesis: a new theory about the role of genito-pelvic reflexes in genito-pelvic pain/penetration disorder.

**Chapter 8** focuses on the debate concerning the demise of vaginismus in favour of genito-pelvic pain/penetration disorder in the DSM-5. Pros and cons are discussed.

**Chapter 9** provides a summarizing discussion and suggestions for future research on genito-pelvic pain/penetration disorder.

**Chapter 10** summarizes the findings of this thesis in Dutch.