

University of Groningen

Acute abdominal pain in children

Timmerman, Marjolijn Engelina Willemijn

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:

2019

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

Citation for published version (APA):

Timmerman, M. E. W. (2019). *Acute abdominal pain in children*. [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).

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.

Acute abdominal pain in children

Marjolijn E.W. Timmerman

ISBN 978-94-028-1579-5
Cover photo Bill White
Cover design Marjolijn Timmerman
Lay-out Marjolijn Timmerman
Printed by IPSKAMP printing

Publication of this thesis was financialy supported by the Junior Scientific Masterclass, the Graduate School of Medical Sciences, the University of Groningen and the University Medical Center Groningen.

© 2019 Marjolijn E.W. Timmerman

All rights reserved. No part of this thesis may be reproduced or transmitted, in any form or by any means, without permission of the author.



rijksuniversiteit
 groningen

Acute abdominal pain in children

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

maandag 8 juli 2019 om 12.45 uur

door

Marjolijn Engelina Willemijn Timmerman

geboren op 1 februari 1993
te Amersfoort

Promotor

Prof. dr. E. Heineman

Copromotor

Dr. P.M.A. Broens

Beoordelingscommissie

Prof. dr. H.J. Verkade

Prof. dr. J.B.F. Hulscher

Prof. dr. M.A. Benninga

Paranimfen

Dhr. M.F. Boekel

Dhr. M.G.R. Timmerman

Table of contents

Chapter 1.	11
General introduction	
Chapter 2.	25
The influence of underweight and obesity on the diagnosis and treatment of appendicitis in children <i>Int J Colorectal Dis. 2016; 31: 1467–1473.</i>	
Chapter 3.	41
Cytomegalovirus and human herpesvirus 6 in the development of acute appendicitis in children <i>Submitted.</i>	
Chapter 4.	51
Using laxatives and/or enemas to accelerate the diagnosis in children presenting with acute abdominal pain: a randomised controlled trial study protocol <i>BMJ Paediatrics Open 2018;2:e000341.</i>	
Chapter 5.	65
The problem of defecation disorders in children is underestimated and easily goes unrecognized: a cross-sectional study <i>Eur J Pediatr. 2018 Sep 27.</i>	
Chapter 6.	81
Prevalence of defecation disorders and their symptoms is comparable in children and young adults: a cross-sectional study <i>Submitted.</i>	

Chapter 7.	95
Reproducibility, feasibility and validity of the Groningen Defecation and Fecal Continence questionnaires. <i>Scand J Gastroenterol. 2018 Jun-Jul;53(7):790-796.</i>	
Chapter 8.	113
Discussion and future perspective	
Chapter 9.	125
Summary	
Chapter 10.	131
Samenvatting	
Chapter 11.	137
Appendix	

