Experiences and quality of life in children and their parents treated with nerve stimulation for urinary incontinence

Submission date	Recruitment status No longer recruiting	Prospectively registered	
26/06/2022		[X] Protocol	
Registration date	Overall study status	[] Statistical analysis plan	
27/06/2022	Completed	[X] Results	
Last Edited 05/12/2022	Condition category Urological and Genital Diseases	Individual participant data	

Plain English summary of protocol

Background and study aims

Posterior tibial nerve stimulation (PTNS) is one of the treatment modalities for children with lower urinary tract dysfunction (LUTD).

Lower Urinary Tract Dysfunction, also known as dysfunctional voiding, is a condition that affects many children and is generally not a serious problem but is certainly a nuisance. Dysfunctional voiding is generally felt to be a dis-coordination between the bladder and the bladder outlet. This study is a mixed-methods analysis to gain insight into the experiences of children treated with PTNS and their parents, the effect of treatment on Quality of Life (QOL) and effect of PTNS on urinary symptoms.

Who can participate?

Children with lower urinary tract dysfunction receiving posterior tibial nerve stimulation (PTNS) treatment and their parents

What does the study involve?

A single-center retrospective chart analysis of all children between 6-12 years of age with LUTD treated with PTNS in a group setting between 2016-2021. Voiding parameters and QOL scores before and after treatment are compared. Qualitative outcomes are assessed by an explorative study involving semi-structured interviews transcribed verbatim and inductively analysed using the constant comparative method. Interviews are done between October 2021-December 2021.

What are the possible benefits and risks of participating? There are no risks or direct potential benefits for participants. Potential burden for the individual subjects is mainly time consummation of 45 minutes.

Where is the study run from? Radboud University Medical Center, Amalia Children's Hospital (the Netherlands)

When is the study starting and how long is it expected to run for? September 2021 to December 2021 Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Liesbeth de Wall, liesbeth.dewall@radboudumc.nl

Contact information

Type(s) Principal Investigator

Contact name Dr Liesbeth de Wall

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers METC Arnhem-Nijmegen 2021-13133

Study information

Scientific Title

Experiences with posterior tibial nerve stimulation in children and their parents, Quality of life and effect on lower urinary tract dysfunction. A mixed methods analysis.

Acronym PTNS and QOL

Study objectives

How do parents and children experience PTNS? How does PTNS treatment effect Quality of life in children with urinary symptoms and their parents? How does QOL change during treatment? What is the outcome of PTNS on urinary symptoms? We hypothesize an improvement of both OQL and urinary symptoms after treatment with PTNS.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 02/09/2021, Medical Ethics Committee METC Arnhem-Nijmegen (Nijmegen, the Netherlands; METCoost-en-CMO@radboudumc.nl; +31-243613154), ref: 2021-13133

Study design

Mixed methods study (quantitative and qualitative analysis). Retrospective chart analysis (quantitative) and explorative qualitative study with semi-structured interviews

Primary study design Observational

Secondary study design Cohort study

Study setting(s) Hospital

Study type(s) Quality of life

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Quality of life and experiences with neuromodulation in children with lower urinary tract dysfunction

Interventions

Quantitative outcomes were assessed trough a single-center retrospective chart analysis of all children treated with PTNS in a group setting between 2016-2021. Voiding parameters and QOL scores before and after treatment were compared. Qualitative outcomes were assessed by an explorative study involving semi-structured interviews transcribed verbatim and inductively analysed using the constant comparative method.

Intervention Type

Procedure/Surgery

Primary outcome measure

Experiences of children and their parents assessed by an explorative study involving semistructured interviews transcribed verbatim and inductively analysed using the constant comparative method.

Secondary outcome measures

Measured using patient records at a single time point (retrospective analysis):

- 1. Change in QOL before and after treatment
- 2. Effect of PTNS on urinary symptoms
- 3. Change in maximum and average voided volume throughout treatment

Overall study start date

02/09/2021

Completion date

28/12/2021

Eligibility

Key inclusion criteria

Children with lower urinary tract dysfunction receiving posterior tibial nerve stimulation (PTNS) treatment and their parents

Participant type(s) Patient

Age group Child

Sex Both

Target number of participants 101

Total final enrolment 101

Key exclusion criteria 1. Children not receiving PTNS 2. Children and or parents not willing to participate in the interviews

Date of first enrolment 01/10/2021

Date of final enrolment 15/12/2021

Locations

Countries of recruitment Netherlands **Study participating centre Radboud University Medical Center, Amalia Children's Hospital** Geert Grooteplein Zuid 10 Nijmegen Netherlands 6500HB

Sponsor information

Organisation Radboud University Nijmegen Medical Centre

Sponsor details Amalia Children's Hospital Geert Grooteplein zuid 10 Nijmegen Netherlands 6500HB +31-24-3613735 Anke.oerlemans@radboudumc.nl

Sponsor type Hospital/treatment centre

Website https://www.radboudumc.nl/EN/Pages/default.aspx

ROR https://ror.org/05wg1m734

Funder(s)

Funder type Other

Funder Name Investigator initiated and funded

Results and Publications

Publication and dissemination plan

Planned publication in journal: international journal of Environmental Research and Health

Intention to publish date

01/12/2022

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be available upon request: Dr.LL de Wall, liesbeth.dewall@radboudumc.nl. This include anonymised data of participants, SPSS data and transcribed data in Atlas.ti. Data are available after publication and after a data transfer agreement and for academic purposes only.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol file</u>	version 1	01/08/2021	27/06/2022	No	No
Results article		25/07/2022	05/12/2022	Yes	No