



Enuresis Update

Welcome to edition four of 'Enuresis Update' 2019

'Enuresis Update' aims to be a resource for all clinicians involved in caring for children and young people with bedwetting. The aim is to promote excellence in clinical practice.

In this edition we have included reviews. We hope you find them interesting and useful.

We would like to know if you find this publication useful and would welcome constructive criticism, ideas and comments, as well as suggestions about what you would like to see included in future editions. We would also be happy to share any updates about your developments in your service.

Please do get in touch with us at email:

bbuk@disabledliving.co.uk



Research Reviews

1. Constipation in nocturnal enuresis may interfere desmopressin management success Y.Ma, Y.Shen, X.Liu

Journal of Pediatric Urology (2019) 177.e1-177.e6

Abstract

The authors recognised that it is well known that the prevalence of constipation in children with enuresis is higher than that in the general population. The question asked was 'does constipation affect the efficacy of Desmopressin in treating enuresis'. This was a prospective study of 383 patients with nocturnal enuresis (NE). Treatment responses in different stratified groups of patients with NE investigated the relationship between the possible factors and the effectiveness of Desmopressin.

Constipation was evaluated using the Rome III criteria. Positive response to two out of the six questions was considered to confirm the presence of constipation.

Results showed that patients with severe NE (>5 nights per week) with constipation had a significantly lower complete response rate to Desmopressin, compared with patients without constipation.

The presence of constipation was always related to the effectiveness of desmopressin whether in monosymptomatic NE or non-monosymptomatic NE. Logistic regression analysis revealed that constipation was significantly related to the effectiveness of desmopressin.

Conclusions: the presence of constipation negatively affects the response to desmopressin in patients with NE, especially in patients with severe enuresis and in patients prescribed the low dose of desmopressin.

Implications for practice

This study confirms that Desmopressin is unlikely to be effective if the child has underlying constipation. It reinforces that the clinician should actively assess for constipation when a child presents with NE.

Attempts at treatment with Desmopressin are likely to fail if constipation is not recognised and treated in children presenting with both monosymptomatic NE and non-monosymptomatic NE.

2. The optimal duration of alarm therapy use in children with primary monosymptomatic nocturnal enuresis Kosilov K, Geltser B, Loparev S, Kuzina I, Shakirova O, Zhuravskaya N, Lobodenko A

Journal of Pediatric Urology (2018) **14**, 447.e1-447.e6

Doi: 10.1016/j.jpuro.2018.03.021

Abstract

Alarm therapy has been a well-established form of treatment for nocturnal enuresis (NE) for over 30 years with proven efficacy in 60-80% of cases. NICE guidance (CG111) states that alarm therapy should be offered as a first line treatment to children who have not responded to conservative measures. The length of treatment advised by NICE is dependant on the patient response, with reassessment required after a period of three months if complete dryness is not achieved. NICE and International Children's Continenence Society (ICCS) considers children who have had no episodes of enuresis for two weeks or more as recovered/cured.

The objective of this study was to determine the efficacy of alarm intervention prolongation after cure, in order to reduce the risk of recurrence of wetting. This was a prospective randomized study consisting of 414 participants, with no daytime symptoms, aged 9-14 years, divided into three groups; group A received alarm therapy for 12 weeks, group B received alarm therapy for 16 weeks and group C for 20 weeks. A comparison of the long-term results of each group was undertaken at three months and one-year post treatment.

The authors reviewed existing research and found a commonality that the greater the duration of alarm therapy, the lower the risk of relapse. Children who were treated with an alarm therapy duration of 16 and 20 weeks had a low relapse rate at three months and one-year post treatment. The percentage of patients suffering a primary monosymptomatic nocturnal enuresis (PMNE) relapse within three months after a three-month course of therapy was 54.1%, close to the data recorded by other researchers. Comparatively, the percentage of PMNE relapse in the 16 week and 20-week groups was 9.5% and 8.4%.

The authors acknowledge that the study had several limitations. The age range of the children accepted on the study excluded children aged 5-8 and those older than 15 years. There was no comparison made between alarm therapy and pharmaceutical therapies for enuresis of varying durations. No definitive explanation was sought as to why the extended length of therapy was more successful in preventing relapse.

In conclusion, the article states that long term alarm therapy not only permits the treatment of a high percentage of children but reduces the relapse rate over one-year post treatment.

Implications for Practice

Alarm therapy is a successful form of treatment for PMNE. The child's suitability for alarm therapy is dependant on several factors, assessed by the clinician and discussed with the child and the parents/carers. This study, with their patient cohort, demonstrated that an extended use of alarm therapy for 16-20 weeks proved successful in significantly reducing the risk of relapse at three months and one-year intervals.

As there is no definite explanation as to why this is effective, patient and parent support to concord with treatment for this duration of time, and sufficient alarms available to accommodate extended loan times would be necessary.

3. 'Frequently recurring' nocturnal polyuria is predictive of response to desmopressin in monosymptomatic nocturnal enuresis in childhood.

P. Marzuillo, R. Marotta, S. Guarino *, M.C. Fedele, F. Palladino, D. Capalbo, N. Della Vecchia, E. Miraglia del Giudice, C. Polito, A. La Manna

Journal of Pediatric Urology <https://doi.org/10.1016/j.jpurol.2018.11.004>

Abstract

Study question: The presence of nocturnal polyuria is considered a positive predictive value for desmopressin response in nocturnal enuresis. The authors set out to assess the impact of three different definitions (ICCS and two others) of nocturnal polyuria (NP) (and of its frequency) and maximum voided volume (MVV) in predicting the response to desmopressin.

Study design: A total of 103 patients with frequent monosymptomatic nocturnal enuresis (≥ 4 wet nights/week) were enrolled. A bladder diary over a 4-day period was collected. The MVV was defined as the highest micturition volume detected from the bladder diary. Nocturnal diuresis was measured over five wet nights (wet diaper weight/g – dry diaper weight/g + first morning void/mls). The patients were then given 120 mcg sublingual desmopressin. After two months, if there was no complete response, the dose was increased to 240 mcg.

Nocturnal polyuria was defined as follows:

1. Definition 1: nocturnal urine production $>130\%$ of the expected bladder capacity (EBC) – the ICCS definition.

2. Definition 2: >100% EBC.

3. Definition 3: > 20 x (age + 9) ml.

The primary outcome was 'response to desmopressin' after 3 months of treatment.

Study results: Overall 53/103 (51%) patients responded to desmopressin. None of the patients that failed to respond to 120mcg responded to the increased dose of 240mcg.

Older patients responded significantly more often than younger patients and a cut off of an MVV of >103% of expected bladder capacity (EBC) for age was sensitive and specific for a positive response.

With regards to the three definitions of NP, in patients with definition 1 nocturnal polyuria in >3 out of 5 wet nights, the response to desmopressin was >80% with a significant odds ratio to respond to desmopressin of 5.1 (95% C.I. 1.1-24.5, p <0.03). In addition, patients with 5 out of 5 nights with polyuria according to definition 3 showed 100% response to desmopressin.

Implications for practice

It appears that children with monosymptomatic nocturnal enuresis who are older, have a MVV of >103% EBC, and who have frequently occurring nocturnal polyuria, either according to the ICCS definition (>130% EBC) or a definition of > 20 x (age + 9) ml, respond very well to desmopressin.

Frequently recurring nocturnal polyuria is more likely to be due to lack of vasopressin release as opposed to alternative mechanisms for nocturnal polyuria, thereby making response to desmopressin more likely.

Bladder & Bowel UK NEW Leaflets

At **Bladder & Bowel UK** we are continuously reviewing our existing resources and creating new ones for children and families (and adults) who are affected by continence conditions as well as the health care professionals who support them. The following are new or newly reviewed:

- Talk About Bedwetting is now available in Welsh as well as English <https://www.bbuk.org.uk/children-young-people/children-resources/>
- All About Desmopressin for Parents and Carers <https://www.bbuk.org.uk/wp-content/uploads/2019/09/Desmopressin-information-for-parents-and-carers.pdf>
- All About Desmopressin for Healthcare Professionals <https://www.bbuk.org.uk/wp-content/uploads/2019/09/Desmopressin-information-for-Healthcare-Professionals-.pdf>

Visit our website at www.bbuk.org to see all our free, downloadable resources.

Bladder & Bowel UK

Enuresis Award Winner 2019

The Bladder & Bowel UK National Enuresis Award 2019 was won by Tracey Thomson, Children and Young People's Continence Nurse Specialist and her team from NHS Fife. The annual Enuresis Award is designed to celebrate and reward any new, innovative or different approach to the care of children with enuresis. The judges were impressed with how Tracey and the team from NHS Fife had managed to create a new region-wide service. Tracey has provided the following report:

In May 2018 NHS Fife instated a dedicated Continence Service for children and young people, with a vision of being able to deliver an integrated and evidence-based community paediatric continence service, that meets the needs of children and young people with bladder and bowel issues.

The key service aim is to help children and young people achieve complete continence, or to manage their condition discreetly and effectively if full control is not clinically possible. The service responds to each child's physical, psychological and social needs in a way that avoids inappropriate referral to acute services. Our desired outcome is to improve the health and wellbeing of these children and young people through supporting local service redesign, which puts the child and family at the centre and provides a cost-effective and high-quality service.

In order to achieve this we have developed new processes, pathways, and documentation.

All the enuresis patients in the region, aged between 5 (or within 6 months of starting school) and 18 years old, are eligible to attend our service. We support children with daytime wetting, as well as primary and secondary nocturnal enuresis through clinics at 10 locations throughout Fife. We support children with soiling issues at further clinics. Our enuresis patient numbers have grown by 69% over the last 17 months.

Following the transition of children and young people to this dedicated service 80 children were on a waiting list to receive an enuresis alarm. Many of these children had been waiting in excess of six months.

A robust management process was put in place for successful return of alarms. Currently the team are supporting 147 children with alarm therapy programmes. We have no children waiting to be issued with alarms and have in excess of 20 alarms ready to be issued as needed.

Best practice guidelines influenced a change in the team's management of children with night time wetting receiving alarm treatment. Families using this treatment now receive an initial call within the first week of starting treatment, and then further telephone support every 2-3 weeks for the duration of the treatment, which is anywhere from 8-20 weeks. Our evidence and data demonstrates an increase in successful treatment outcomes for these patients, but has substantial workload implications in terms of time commitment for calls.

In January 2019, a joint clinic with the Urology Nurse Specialists from Royal Hospital for Sick Children's Edinburgh was commenced. This allows us to offer the children of Fife a local clinic where they can be offered bladder scanning and uroflow investigations, without having to travel out of area.

The team welcomed a capital funding agreement to purchase three bladder scanners. These are now being used at all clinic locations around Fife, in an attempt to provide improved accessibility as well as equity of service across the region.

We continue to set up links with other professional agencies to support the children in our care., In addition we work hard to raise awareness of bowel and bladder issues and reduce the stigmas associated with these problems.

Tracey Thomson , C&YP Continence Nurse Specialist, NHS Fife



Bladder & Bowel UK congratulate the winning entrants and would like to thank Slater and Gordon for their ongoing support with this award.



Look out for the Bladder & Bowel UK Enuresis Award 2020, sponsored by Slater and Gordon. Entries will open in the Spring with a closing date that is anticipated to be at the end of July.

Resources

More New Resources for Children's Continence

The Children's Continence Commissioning Guide 2019

The Paediatric Continence Forum, is a multi-disciplinary national campaign group. In 2014 it published a Commissioning Guide for NHS community children's continence services. This has now been fully updated and revised. 2019 Children's Continence Commissioning Guide – a handbook for the commissioning and running of children's community continence services gives commissioners and clinicians running services a comprehensive account of how a service should be set up and managed. It provides clear service outcomes and indicators to help measure service delivery. Based on the most up-to-date research, it also provides helpful links to a range of other resources.

The Guide is available from the PCF website and at: <https://www.bbuk.org.uk/wp-content/uploads/2019/12/Managing-Continence-Problems-in-Schools-2019.pdf>

Managing Bladder and Bowel Issues in Nurseries, Schools and Colleges 2019

Bladder & Bowel UK have teamed up with ERIC to produce a document that provides comprehensive information and advice for educational establishments:

Managing Bladder and Bowel Issues in Nurseries, Schools and Colleges – guidance for school leaders, proprietors, governors, staff and practitioners was developed in response to numerous helpline calls from families, young people, health and education professionals who were uncertain about the role of educational settings in supporting children and young people with continence issues. The document contains information on how continence develops, what causes problems, legislation, health and safety, safeguarding and much more. It is available from:

<https://www.bbuk.org.uk/wp-content/uploads/2019/12/Managing-Continence-Problems-in-Schools-2019.pdf>

The same webpage also has sample toilet charter, an example of a care plan and an intimate care policy. All of these are provided in word so that they may easily be adapted to suit individual use.

For further information and advice contact the Bladder & Bowel UK confidential helpline at email bbuk@disabledliving.co.uk or telephone 0161 607 8219

Sharing Best Practice

Training

For more information about bespoke training email:

bbuk@disabledliving.co.uk

Bladder & Bowel UK National Symposiums

Coventry: 3rd March 2020

Bolton 30th September 2020

More information available at:

<https://www.bbuk.org.uk/professionals/professionals-training/training-symposium/>

Children's continence special interest group

To join email bbuk@disabledliving.co.uk Members receive email newsletters and information about training, developments and issues related to continence.

Free downloadable resources

Available from the Bladder & Bowel UK website at:

www.bbuk.org.uk

Editorial Group: Dr Fiona Cameron (community paediatrician), Dr Paula Drummond (consultant community paediatrician), Dr Catriona Morrison (consultant paediatrician), Davina Richardson (children's specialist nurse), June Rogers MBE (children's specialist nurse), Martina Thomas (children's continence nurse), Dr Anne Wright (consultant paediatrician)

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Bladder & Bowel UK

Supporting people with bladder and bowel problems

part of Disabled Living