

Children's Contenance

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1. Incidence of incontinence-associated dermatitis in hospitalised neonates. Adaptation and validation of a severity scale

Authors: Balaguer-López, Evelin;Estañ-Capell, Javier;Rodríguez Dolz, María Carmen;Barberá Ventura, María Carmen;Ruescas López, Manuel and García-Molina, Pablo

Publication Date: /06/03/ ,2024

Journal: Anales De Pediatría

Abstract: Introduction: Up to 60% of hospitalised neonates may develop incontinence-associated dermatitis (IAD). Our aim was to adapt the Clinical Evaluation Scale for Characterization of the Severity of Diaper Dermatitis to the Spanish population and to find out the nationwide frequency of IAD in hospitalized neonates.; Methods: Cross-cultural adaptation and assessment of content validity of the scale. We carried out a prospective, multicentre observational study of the incidence of nappy rash in postnatal wards and neonatal intensive care units in 6 Spanish hospitals.; Results: We obtained a content validity index of 0.869 for the total scale (95% CI, 0.742-0.939). The sample included 196 neonates. The cumulative incidence of IAD was 32.1% (9.1% mild-moderate, 8% moderate and 1.6% severe). The incidence rate was 2.2 IAD cases per 100 patient days. A stool pH of less than 5.5, a greater number of bowel movements a day, a greater daily urine output and the use of oral drugs were among the factors associated with the development of IAD.; Conclusion: The Spanish version of the Clinical Evaluation Scale for Characterization of the Severity of Diaper Dermatitis had an adequate content validity for the assessment of DAI in the hospitalised neonatal population. Mixed feeding, treatment with oral drugs and the use of medical devices in the perianal area were associated with an increased risk of nappy dermatitis in infants. (Copyright © 2024 Asociación Española de Pediatría. Published by Elsevier España, S.L.U. All rights reserved.)

2. Ectopic Ureter Opening in Vagina: A Rare Cause of Nonfunctional Kidney and Urinary Incontinence in a Pediatric Patient

Authors: Dhale, Abhijit;Pendkar, Ruturaj;Hatwar, Ghanshyam;Dharamshi, Jay D. and Trivedi, Yashasvi

Publication Date: /05/10/ ,2024

Journal: Cureus 16(5), pp. e60052

Abstract: An ectopic ureter is a condition characterized by a ureter, whether single or duplex, that fails to open in the trigone area of the urinary bladder but instead drains outside of it. This anomaly arises congenitally due to abnormal migration of the ureteric bud during its insertion into the urinary bladder. Here, we present a case involving an ectopic ureter draining into the vagina, with continuous urinary incontinence. We discuss the diagnosis, evaluation, and management of urinary incontinence in a female because of an ectopic ureter. A 9-year-old girl child presented with a continuous urinary leak or incontinence requiring the use of one to two pads per day that progressively became wetter throughout the day. Physical examination revealed a normal urethral meatus and vagina without obvious visible dribbling of urine at the introitus. CT urography showed significant dilation of the right ureter, causing hydroureter and ectopic insertion of the tortuous right ureter near the external urethral orifice at the vaginal vestibule, along with an atrophic right kidney. A DTPA (diethylenetriamine pentaacetate) scan indicated the nonfunctional status of the right kidney. The patient underwent a right nephroureterectomy, leading to a complete resolution of urinary incontinence. Ectopic ureter causing nonfunctional kidney and urinary leak or incontinence is rare. This case emphasizes the importance of a comprehensive diagnostic workup for achieving a better prognosis and initiating early treatment of ectopic ureter.; Competing Interests: The authors have declared that no competing interests exist. (Copyright © 2024, Dhale et al.)

3. Voiding camp: A successful and unique bladder rehabilitation program for children with urinary incontinence

Authors: Dossche, L.;Veys, E.;Renson, C.;Spinoit, A. F.;Vandamme, E.;Waterschoot, M.;Vande Walle, J.;Van Laecke, E. and Raes, A.

Publication Date: /05/15/ ,2024

Journal: Journal of Pediatric Urology

Abstract: Introduction & Background: Standard urotherapy is a well-established treatment for children with incontinence, although it is often challenging for both child and parents, and not always successful. As an alternative, several in- and outpatient bladder training programs have shown positive results on achieving continence. However, the disadvantage is the hospital environment, which can be more stressful for the child, and also quite expensive for society.; Objective: The aim was to evaluate the outcome on achieving continence following a voiding camp, where standard urotherapy was applied during a one-week stay at a regular summer youth camp, outside the hospital.; Study Design: Retrospective analysis of 105 children with urinary incontinence, followed in an expert centre for urinary incontinence for at least one year. Data at 7 different time points, before, during and until 6 months after voiding camp were collected.; Results: Even though all children had regular follow-up in an expert centre for urinary incontinence for at least one year before participating voiding camp, only 15% of the children reached the recommended amount of daily fluid intake (1.5 L/day). Once minimal daily fluid intake was re-established during the voiding camp, an immediate increase in the maximum voided volume (MVV), and a decrease in the number of wet days and wet nights per week was noted. This effect on a higher MVV remained even 3 months after voiding camp.; Discussion: Although sufficient daily fluid intake is a well-established part of standard urotherapy, up until now there was no data that proved the positive impact of sufficient daily fluid intake on bladder volume training and achieving continence in children.; Conclusion: Voiding camp, as a unique bladder rehabilitation program for children with incontinence, is a successful alternative treatment option. Optimizing the daily fluid intake during voiding camp had a major positive impact on bladder volume training and achieving continence in children.; Competing Interests: Conflict of interest None. All authors report no potential conflicts of interest that might be relevant to the content of this manuscript. (Copyright © 2024 Journal of Pediatric Urology Company. Published by Elsevier Ltd. All rights reserved.)

4. Uretrovaginal reflux as a cause of daytime intermitent urinary incontinency in a 14-year old girl

Authors: Habek, Dubravko

Publication Date: /06// ,2024

Journal: European Journal of Obstetrics, Gynecology, and Reproductive Biology 297, pp. 260-261

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

5. Sleep duration, sleep problems and developmental trajectories of urinary incontinence: a prospective cohort study

Authors: Joinson, Carol;Grzeda, Mariusz T.;Heron, Jon and von Gontard, Alexander

Publication Date: /06/03/ ,2024

Journal: European Child & Adolescent Psychiatry

Abstract: To examine if preschool sleep duration and sleep problems are associated with urinary incontinence (UI) at primary school-age. We used multinomial logistic regression to examine the association of child sleep duration/problems (3½ years) with UI trajectories (4-9 years) in 8751 (4507

boys, 4244 girls) from the Avon Longitudinal Study of Parents and Children. We adjusted for sex, socioeconomic indicators, mothers' emotional/practical/financial support, developmental delay, stressful life events, temperament, and emotional/behaviour problems. Preschool children who slept more than 8½ hours per night had a decreased probability of UI at school-age. There was a 33% reduction in odds of daytime wetting per additional hour of sleep (odds ratio OR] = 0.67, 95% confidence interval CI] 0.52-0.86). Sleep problems were associated with increased odds of UI e.g., getting up after being put to bed was associated with daytime wetting (OR = 2.20, 95% CI 1.43-3.39); breathing problems whilst sleeping were associated with delayed bladder control (OR = 1.68, 95% CI 1.12-2.52), and night-time waking was associated with persistent (day and night) wetting (OR = 1.53, 95% CI 1.16-2.00). Waking during the night and waking up early in the morning were associated with reduced odds of bedwetting at school-age (OR = 0.76, 95% CI 0.61-0.96 and OR = 0.80, 95% CI 0.64-0.99 respectively). Preschool children who sleep for longer have a lower likelihood of UI at school-age, whilst those with sleep problems are more likely to experience daytime wetting and combined (day and night) wetting, but not bedwetting alone. Short sleep duration and sleep problems in early childhood could be indicators of future problems attaining and maintaining bladder control. (© 2024. The Author(s).)

6. Bladder Management and Continence in Girls With Cloacal Malformation After 3 Years of Age

Authors: Morin, Jacqueline P.;Srinivas, Shruthi;Wood, Richard J.;Dajusta, Daniel G. and Fuchs, Molly E.

Publication Date: 2024

Journal: Journal of Pediatric Surgery

Abstract: Background: Multiple factors impact ability to achieve urinary continence in cloacal malformation including common channel (CC) and urethral length and presence of spinal cord abnormalities. Few publications describe continence rates and bladder management in this population. We evaluated our cohort of patients with cloacal malformation to describe the bladder management and continence outcomes.; Methods: We reviewed a prospectively collected database of patients with cloacal malformation managed at our institution. We included girls ≥3 years (y) of age and evaluated their bladder management methods and continence. Dryness was defined as <1 daytime accident per week. Incontinent diversions with both vesicostomy and enterovesicostomy were considered wet.; Results: A total of 152 patients were included. Overall, 93 (61.2%) are dry. Nearly half (47%) voided via urethra, 65% of whom were dry. Twenty patients (13.1%) had incontinent diversions. Over 40% of the cohort performed clean intermittent catheterization (CIC), approximately half via urethra and half via abdominal channel. Over 80% of those performing CIC were dry. In total, 12.5% (n = 19) required bladder augmentation (BA). CC length was not associated with dryness (p = 0.076), need for CIC (p = 0.253), or need for abdominal channel (p = 0.497). The presence of a spinal cord abnormality was associated with need for CIC (p = 0.0117) and normal spine associated with ability to void and be dry (p = 0.004) CONCLUSIONS: In girls ≥ 3 y of age with cloacal malformation, 61.2% are dry, 65% by voiding via urethra and 82% with CIC. 12.5% require BA. Further investigation is needed to determine anatomic findings associated with urinary outcomes.; Level of Evidence: IV.; Competing Interests: Conflict of interest None. (Copyright © 2024 Elsevier Inc. All rights reserved.)

7. A case report of a giant solitary juvenile polyp: from obstructed defecation syndrome to incontinence

Authors: Teoh, Zhan Huai;Soh, Jien Yen;Mohamad, Nasibah;Zawawi, Norzaliana;Zakaria, Andee Dzulkarnaen;Zakaria, Zaidi and Wong, Michael Pak-Kai

Publication Date: /05// ,2024

Journal: Annals of Coloproctology 40, pp. S27-S31

Abstract: Juvenile polyps (JPs) are the most common polyps in pediatric patients. We present the case of an 18-year-old male patient with a giant solitary JP resembling solitary rectal ulcer syndrome

(SRUS). The presenting history was rectal bleeding and symptoms of obstructed defecation syndrome. Colonoscopy revealed a polypoidal mass at the anorectal junction, with biopsy-confirmed SRUS. The symptoms worsened, and a protruding mass from the anus caused fecal incontinence. Pelvic magnetic resonance imaging showed a huge pedunculated mass occupying the low rectum with local compression of the urinary bladder. Transanal excision of the anal tumor was performed due to bleeding. A histopathological examination showed a JP with high-grade dysplasia. A histological examination to differentiate JPs and SRUS could be challenging based on a superficial forceps biopsy. Therefore, an excision biopsy is usually warranted with the understanding that adenomatous or malignant transformation is found in 5.6% to 12% of all JPs.

8. An Economic Evaluation of a Web-Based Management Support System for Children With Urinary Incontinence: The eADVICE Trial

Authors: Von Huben, Amy;Howell, Martin;Richards, Deborah;Hamilton, Sana;Howard, Kirsten;Teixeira-Pinto, Armando;Craig, Jonathan C.;Seton, Chris;Waters, Karen;Deshpande, Aniruddh;Scott, Karen M. and Caldwell, Patrina H. Y.

Publication Date: 2024

Journal: The Journal of Urology , pp. 101097JU00000000000003970

Abstract: Purpose: Children who require specialist outpatient care typically wait substantial periods during which their condition may progress, making treatment more difficult and costly. Timely and effective therapy during this period may reduce the need for lengthy specialist care. This study evaluated the cost-effectiveness of an individualized, evidence-informed, web-based program for children with urinary incontinence awaiting a specialist appointment (Electronic Advice and Diagnosis Via the Internet following Computerized Evaluation eADVICE)] compared to usual care. eADVICE was supervised by a primary physician and delivered by an embodied conversational agent.; Materials and Methods: A trial-based cost-effectiveness analysis was performed from the perspective of the health care funder as a substudy of eADVICE, a multicenter, waitlist-controlled, randomized trial. Outcomes measures were incremental cost per incremental change in continence status and quality of life on an intention-to-treat basis. Uncertainty was examined using cost-effectiveness planes, scenarios, and 1-way sensitivity analyses. Costs were valued in 2021 Australian dollars.; Results: The use of eADVICE was found to be cost saving and beneficial (dominant) over usual care, with a higher proportion of children dry over 14 days at 6 months (risk difference 0.13; 95%CI 0.02-0.23, P = .03) and mean health care costs reduced by \$188 (95%CI \$61-\$315) per participant.; Conclusions: An individualized, evidence-informed, web-based program delivered by an embodied conversational agent is likely cost saving for children with urinary incontinence awaiting a specialist appointment. The potential economic impact of such a program is favorable and substantial, and may be transferable to outpatient clinic settings for other chronic health conditions.

9. Can targeted, non-invasive, EMG-uoflowmetry led assessments help characterisation of non-neurogenic bladder dysfunction in children?...32nd National Conference on Incontinence (NCOI), May 22-25, 2024, Brisbane, Queensland

Authors: Wijekoon, Naveen and Deshpande, Aniruddh

Publication Date: //Winter ,2024

Journal: Australian & New Zealand Continence Journal 30(2), pp. 24

Abstract: Background: Non-neurogenic bladder or lower urinary tract dysfunction (LUTD) is a common clinical entity in children with the majority responding to urotherapy. For those refractory to urotherapy, identifying the optimal investigation is a challenge. Invasive urodynamics (Videocystometry-VCMG) is poorly tolerated by school age children and artefact prone in toddlers. Aims: To evaluate diagnostic efficacy and acceptability of EMG-uoflowmetry led non-invasive testing protocol for children who remain refractory to urotherapy with limited or no concerns about progressive damage to upper

tracts. Methods: Database and medical chart review of consecutive cases referred from the bladder clinic, urology clinic and/or medical clinics was undertaken. Patients who underwent non-invasive testing with a background of structural anomalies were excluded. After ruling out faecal impaction, optimised EMG-urolflowmetry was performed. ICCS endorsed diagnoses were given for the dominant abnormality using the EMG-urolflowmetry information, bladder diary and post void residuals. Data were analysed to estimate change to or supplementary diagnoses, escalation to VCMG, treatment outcomes (wherever available) and compliance/acceptability by patients and families. Results: Ninety-two studies (out of a total of 127) were eligible from 2019 to 2023 54.3% (n=50) males; median age 9 (4-16) years]. Out of the 92 studies, 62% (n=57) had abnormalities of lower urinary tract function 52.6% (n=30) dysfunctional voiding; 26.3% (n=15) possible underactive bladder; 15.8% (n=9) primary bladder neck dysfunction; 5.3% (n=3) possible overactive bladder. Background diagnoses included vesicoureteric reflux (35.1%), severe constipation/bladder-bowel dysfunction (21%). Pre and post-test diagnoses were similar in 33.3% (n=19) whereas EMG-urolflowmetry changed the LUTD diagnosis in 66.7% (n=38). Out of the total 127, further invasive UDS was required in 1.6% (n=2) patients. Follow-up non-invasive testing to assess treatment response was performed in 7.1% (n=9). No family or child refused or reported extreme distress. Two patients (3.5%) could not void. Discussion: Although no information could be obtained regarding storage or voiding pressures, EMG-urolflowmetry led assessments were well accepted by patients and allowed a robust characterisation of voiding patterns and enabled redirection of care in children with non-neurogenic bladder dysfunction refractory to urotherapy.

Sources Used:

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