



## BLADDER AND BOWEL DYSFUNCTION IN CHILDREN WITH ACQUIRED BRAIN INJURY: A MISSED PROBLEM?

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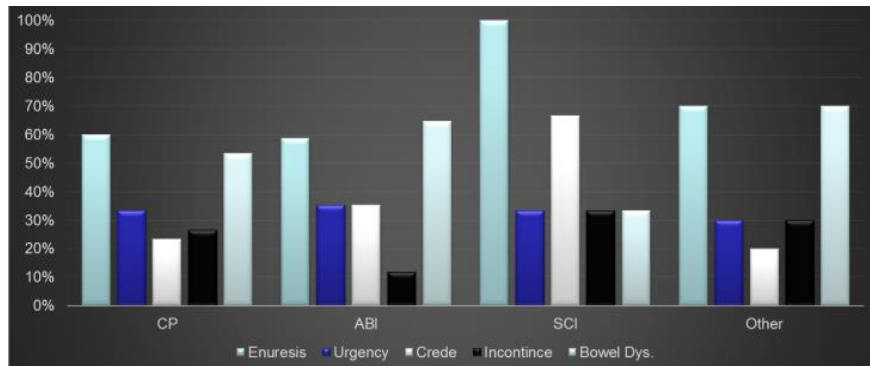
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Bladder and bowel dysfunctions (BBD) in children with spinal cord injuries (SCI) have been evaluated as in cerebral palsy (CP). Scant data are available in acquired brain injury (ABI). Aim of our study is to evaluate BBD risk and incidence in ABI children.

**Material&Metod:** All new patients admitted in our Neuro-Rehabilitation Department from the 1<sup>st</sup> July to the 30<sup>th</sup> September, aged 3 to 18 years old, were evaluated. Data were collected considering clinical diagnosis, International Consultation on Incontinence Modular Questionnaire (ICIQ), Wee-FIM Scale, Bristol scale, Gross Motor Function Classification System (GMFCS) and the Communication Function Classification System (CFCS). Statistical analysis was performed with Microsoft SPSS, p<0,001 was considered significative.

**Results:** 64 patients were evaluated: 4 were excluded ( 3 refused , 1 not completing screening )30 presented CP, 17 ABI, 3 SCI, 10 others neurological pathologies. 31 were females and 29 were males, with an average age of 8 + 3,5 SD years.

About ABI patients none of them had never evaluated before by pediatric urologist. No statistical difference is present between ABI and CP.



**Conclusion:** ABI is an heterogenous group of patients with vascular, oncological, traumatic brain injury. ICIQ is a valid screener ABI for detecting BBD . BBD are present in ABI as in CP and we can consider BBD a missed problem in ABI reclaiming major attention.

### Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

### Italian validation of the International Consultation on Incontinence Questionnaires

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	<b>GMFCS Level I</b> Children walk unaided and outdoors and climb stairs without hesitation. Children perform gross motor skills including running and jumping, but speed, balance and coordination are impaired.
	<b>GMFCS Level II</b> Children walk unaided and outdoors and climb stairs holding onto a railing. Children may propel a self-propelled manually or are transported when traveling for long distances or outdoors on uneven terrain.
	<b>GMFCS Level III</b> Children walk unaided on a level surface with an assistive mobility device. Children may climb stairs holding onto a railing. Children may propel a self-propelled manually or are transported when traveling for long distances or outdoors on uneven terrain.
	<b>GMFCS Level IV</b> Children may continue to walk for short distances on a sidewalk or rely more on wheeled mobility at home and in the community.
	<b>GMFCS Level V</b> Physical impairment restricts voluntary control of movement and the ability to maintain voluntary head and trunk posture. All areas of motor function are limited. Children have no means of independent mobility and are transported.

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