The new ICCS terminology
J Urol 176, 314-324, 2006

The Standardization of Terminology of Lower Urinary Tract Function in Children and Adolescents: Report from the Standardisation Committee of the International Children's Continence Society
Tryggve Nevéus, Alexander von Gontard, Piet Hoebeke, Kelm Hjälmås, ‡ Stuart Bauer, Wendy Bower, Troels Munch Jørgensen, Søren Rittig, Johan Vande Walle, Chung-Kwong Yeung and Jens Christian Djurhuus

… or find it at i-c-c-s (no password needed)
Disclaimer

These slides are produced by the International Children’s Continence Society (ICCS) and may be freely used for educational purposes as long as they are not altered and the source is acknowledged.
Why the ICCS?

• ICCS is the only global, multidisciplinary organisation focused on the paediatric LUT.

• No other group fulfills all those three criteria.
Which were our guiding principles?

- Terms should be descriptive
  - and not express theories about underlying pathogenesis etc

- Terms should be unambiguous
  - It should be clear what we are talking about

- Paediatric terminology should follow adult terminology, whenever possible

- Correct terminology should be simple and not require the use of complicated or invasive procedures
  - History and a voiding chart should be enough
  - Everybody should be able to use the correct terminology
Terminology is not everything

• Terminology is not health-care

• The ICCS terminology document will not tell anybody what to do in the clinic

• The terminology will, if widely used, make it easier for clinicians and researchers around the world to understand each other

• The ICCS document will tell you which words to use when sending your papers to the ICCS conferences
Incontinence = involuntary wetting at an inappropriate time and place in a child 5 years old or more
Incontinence terminology

- Continuous incontinence
  - All ages

- Intermittent incontinence
  - Daytime incontinence
  - Nocturnal incontinence (enuresis)

- Nocturnal incontinence
  - 5 years or older
Enuresis = (intermittent) incontinence while asleep

Regardless of …

... whether cystometry reveals that the voiding is complete and normal or not

... whether the child also suffers from daytime incontinence or not

... what we think the cause is
Monosymptomatic enuresis = Enuresis in a child without daytime bladder symptoms

i.e. enuresis without:

• Urgency
• Incontinence
• Increased/decreased voiding frequency
• Voiding postponement
• Holding maneuvers
• Interrupted flow

Otherwise:

• Nonmonosymptomatic enuresis
Children with enuresis and daytime incontinence have enuresis* and daytime incontinence.

We do not change the name of the disorder just because the child also suffers from another disorder, even though it gives clues regarding pathogenesis (compare: asthma and hay-fever).

The coexistence of the two may also be just coincidence. Both conditions are common!

* Of the nonmonosymptomatic subtype
Enuresis subdivision

**Secondary enuresis** = enuresis in a child who has previously been dry for at least 6 months

**Primary enuresis** = enuresis without such a preceding period of dryness

The only reason to separate between these entities is that comorbidity (psychiatric or somatic) is more common in the former group
Primary monosymptomatic Enuresis

Primary nonmonosymptomatic Enuresis

Secondary monosymptomatic Enuresis

Secondary nonmonosymptomatic Enuresis
Findings related to the bladder

- 8 voids or more per day = increased daytime voiding frequency
- 3 voids or less per day = decreased daytime voiding frequency
- But remember: if you talk about the output you should also think about the input!
- Six voids per day may be very little if you drink a lot
More findings related to the bladder

- **Bladder capacity = Voided volume**
- ”Functional bladder capacity” is substituted with **maximum voided volume**, as measured from a voiding diary
- Maximum voided volume can be compared with **expected bladder capacity**, as deduced from the standard formula \([30 + (30 \times \text{age})] \text{ml}\)
Terminology for urine volumes

- Nocturnal polyuria:
- Nocturnal urine volume > 130% of EBC
- Nocturnal urine production is only interesting in relation to how much urine the bladder can hold
Findings related to the kidney, relevant in the incontinent child

**Polyuria** = 24 h urine output >2 l/m² body surface area

**Nocturnal polyuria** = night-time output >130% of expected bladder capacity for age

But more important: document the amounts!
More findings related to the bladder

Terms deduced from history:
Bladder instability = Overactive bladder

Cystometric terms:
Detrusor instability = Detrusor overactivity

This is in accordance with ICS adult terminology Instability is an ambiguous word
More findings and symptoms related to the bladder

Lazy bladder

Detrusor underactivity
Determined from cystometry

Underactive bladder
Determined from history and voiding diary data

We cannot speak about the detrusor without having performed cystometry
Day-time LUT conditions

**Overactive bladder:** children with urgency (increased voiding frequency and/or incontinence often present but not required for use of the term)

**Urge incontinence:** children with incontinence and urgency
Day-time LUT conditions

**Voiding postponement:** children who are observed to habitually postpone voiding using holding maneuvers (decreased voiding frequency and urgency often present but not required for use of the term)

**Underactive bladder:** Children with low voiding frequency who need to use raised intra-abdominal pressure to void
Dysfunctional voiding: children who habitually contract the sphincter during voiding, producing uroflow curves of a staccato type

Note:
This term says nothing about the storage phase. Dysfunctional voiding or voiding dysfunction is not the same as "any bladder disturbance"
Overlap between groups of children with bladder problems

Dysf v

UAB

NE

OAB

Urge inc

VP
Day-time LUT conditions

The sorting of incontinent children into clinical subgroups (OAB, urge incontinence, voiding postponement, underactive bladder etc) is not very important!

The assessment, quantification and documentation of the following is important:

1. Incontinence
2. Voiding frequency
3. Voided volumes
4. Fluid intake
Tools of investigation mentioned and defined in the standardisation document

Bladder diary
Uroflow + residual urine assessment
Cystometry
4 hour voiding observation
Items to be included in a standard bladder diary, used in the research setting

**Required**
- Voids (timing and volumes) \( \geq 2 \) days
- Fluid intake \( \geq 2 \) days
- Daytime LUT symptoms (incontinence etc) 14 days
- Enuresis and/or nocturia 14 nights

**Recommended**
- Enuresis volumes 7 days
- Bed-time, wake-up time 14 days
- Bowel movements 14 days

**Otherwise it can be called a frequency-volume chart**
## Treatment success: the words to use

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresponse</td>
<td>&lt;50% reduction</td>
</tr>
<tr>
<td>Partial response</td>
<td>50-89% reduction</td>
</tr>
<tr>
<td>Response</td>
<td>&gt;89% reduction</td>
</tr>
<tr>
<td>Full response</td>
<td>100% reduction, or maximum 1 accident per month</td>
</tr>
<tr>
<td>Relapse</td>
<td>&gt;1 accident per month</td>
</tr>
<tr>
<td>Continued success</td>
<td>No relapse in 6 months without treatment</td>
</tr>
<tr>
<td>Complete success</td>
<td>No relapse in 2 years without treatment</td>
</tr>
</tbody>
</table>
Treatment success; background

In the **clinical** setting, treatment success means that the family is satisfied.

![Smiley face]

In the **research** setting, treatment success is determined from a voiding chart.

Treatment success and cure are not synonymous.
### Diagnostic criteria of constipation in children

<table>
<thead>
<tr>
<th>Paris Consensus on Childhood Constipation Terminology (PACCT) Group</th>
<th>Diagnostic criteria for Functional Constipation in Children (Rome III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More than one episode of faecal incontinence per week</td>
<td>• Two or fewer defaecations in the toilet per week</td>
</tr>
<tr>
<td>• Presence of large stools in the rectum or palpable on abdominal examination</td>
<td>• At least one episode of faecal incontinence per week</td>
</tr>
<tr>
<td>• Passing large stools that may obstruct the toilet</td>
<td>• History of retentive posturing or excessive volitional stool retention</td>
</tr>
<tr>
<td>• Display of retentive posturing and withholding behaviours</td>
<td>• History of painful or hard bowel movements</td>
</tr>
<tr>
<td>• Painful defaecation</td>
<td>• History of a large faecal mass in the rectum</td>
</tr>
<tr>
<td></td>
<td>• History of large diameter stools that may obstruct the toilet</td>
</tr>
</tbody>
</table>

Must include two or more of the above items, in a child with a developmental age of at least 4 years.

*Accompanying symptoms may include irritability, decreased appetite and/or early satiety. The accompanying symptoms disappear immediately following passage of stool.*
Fecal Incontinence:
 passage of stools in an inappropriate place

We don’t use the term ‘encopresis’ anymore
We don’t use the term ‘anismus’ either, instead pelvic floor dyssynergia
Conditions

• Functional Fecal Incontinence
  • Constipation associated: common
  • Non-retentive: rare

• Organic Fecal Incontinence
  • Congenital malformations of anorectum
  • Spinal Cord dysfunction
• CAIRNS CONVENTION CENTRE - AUSTRALIA

• The Joint Meeting of the
• International Children’s Continence Society and the Continence Foundation of Australia

• Sep or Oct 2014

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