Anal incontinence

Red flags*
- (recent) trauma
- pre-existing (unexplained) fever
- recent unexplained weight loss (> 5 kg/month)
- prolonged use of corticosteroids
- constant pain that does not decrease at rest or after changing position
- history of cancer
- general malaise
- nocturnal pain
- extensive neurological signs and symptoms
- inability to urinate/defecate
- blood and mucus in stools
- pain during defecation
- acute loss of stools
- abnormal color of stools not related to food consumed
- brief anemia episode

* Attention to red flags is required throughout the diagnostic and therapeutic process for physical therapy.

Methodical approach

Direct Access to Physical Therapy
recommendation: contact family physician/specialist (with patient’s permission)

Referral

(Supplementary) history

- reason for contact and patient’s presenting problem
- nature (underlying cause/condition) and severity of anal incontinence (in ICF terms) and modifiability (impeding factors, general and local)
- proctological, gynecological, obstetrical, urological and sexological history in relation to the musculoskeletal system
- comorbidity
- coping strategies
- psychosocial problems
- defecation and micturition patterns
- nutrient and fluid intake
- status of components of continence system (muscle function, reservoir function, consistency of stools, awareness and acknowledgment of health problem; interactions between these)
- patient’s pattern of expectations

Physical examination

General inspection
- inspecting breathing, spinal column, pelvis, hips, gait analysis

Local inspection of vagina/anus/perineum
- inspecting pelvic floor at rest (introitus, perineum, vagina, anus)
- inspecting pelvic floor during contraction (contraction strength, performance, co-contractions and breathing)
- inspecting pelvic floor during coughing
- inspecting pelvic floor during straining

Supplementary functional examination
- palpation at rest, anorectal
- palpation during contraction, anorectal
- palpation during straining, Valsalva, coughing (involuntary) rectal
- rectal balloon and electromyography

Measurement instruments
- Wexner score
- Global Perceived Effect
- defecation diary

Physical therapy analysis/diagnosis
(Consequences of anal incontinence)

Identification of impairments (nature, severity), limitations and participation restrictions
### Identification of patients problem category:

<table>
<thead>
<tr>
<th>I: no anal incontinence with pelvic floor dysfunction</th>
<th>II: anal incontinence without pelvic floor dysfunction</th>
<th>III: anal incontinence with factors impeding recovery or adjustment processes</th>
<th>IV: anal incontinence (I/II/III) + general factors impeding recovery or adjustment processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>with awareness of loss of stools (urgency): external anal sphincter + m. puborectalislevator ani</td>
<td>without awareness of loss of stools (passive): internal anal sphincter</td>
<td>neurological problem</td>
<td>neurological problem</td>
</tr>
<tr>
<td>yes (local/central)</td>
<td>no</td>
<td>yes (local/central)</td>
<td>no</td>
</tr>
</tbody>
</table>

#### Goal

- Improving components of continence:
  1. Muscle function: basic activity, timing, coordination, relaxation, duration, reflex activity (fast-twitch/slow-twitch)
  2. Reservoir function (perception of filling sensation): first sensation, first feeling of urgency, maximum tolerable volume, appropriate reaction of pelvic floor to rectal filling (= being continent)
  3. Fecal consistency: from loose to soft shaped
  4. Recognition of health problem, acknowledgement of health problem, expression (uttering, setting in motion) and letting go*
  5. Interaction between the above continence components

#### Strategy

- Optimizing one continence component → optimizing the complex mechanism of continence components → making ADL tasks become automatic

#### Therapy

- Providing education and advice

<table>
<thead>
<tr>
<th>Disorder</th>
<th>IIA</th>
<th>IIB</th>
<th>IIC</th>
<th>IID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anal incontinence abnormal peripheral dysfunction spinal cord S2–S4</td>
<td>- Reduced rectal capacity</td>
<td>- Intestinal system function problem*</td>
<td>- Fecal consistency</td>
<td>- Sphincter dysfunction</td>
</tr>
<tr>
<td>Anorectal sensation abnormal</td>
<td>- Overflow diarrhea</td>
<td>- Paradoxical straining</td>
<td>- Loss of discrimination between flatus and feces</td>
<td>- Pelvic organ prolapse (PDP)*</td>
</tr>
</tbody>
</table>

#### Evaluation

- Evaluating the outcome: Wexner score, Global Perceived Effect, defecation diary

#### Follow-up

- Checkup at predefined moment(s) → brief reminder therapy (if necessary)

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*ES = electrostimulation; PFMT = pelvic floor muscle training; BF = biofeedback (electromyogram, pressure and rectal balloon).


b. Without neurological problem: 3rd/4th degree tear, trauma, overflow diarrhea, paradoxical straining; local or central neurological problem (sensory): n. pudendus lesion (S2–S4), iatrogenic.

c. Voluntary control, i.e., “awareness”.

d. Pelvic organ prolapse (PDP).

e. Overflow diarrhea, irritable bowel syndrome, Morbus Crohn, colitis ulcerosa.

f. Biofeedback (EMG)/pressure/rectal balloon training: if insufficient progress and to speed up results.

*Dutch acronym HEEL: Merken van gezondheidsprobleem, Erkennen van gezondheidsprobleem, Expressie (uiten, in beweging brengen) en Letselen (eigen maken)