

TERMS

Constipation in *adults* is diagnosed if there are at least two of the following symptoms:

- ★ defecation frequency ≤ 2 per week;
- ★ increased straining during defecation;
- ★ hard and/or pebble-like defecation;
- ★ feeling of incomplete defecation;
- ★ feeling of anorectal obstruction/blockage;
- ★ manual manoeuvres to facilitate defecation.

Constipation in *children* is diagnosed if there are at least two of the following symptoms:

- ★ defecation frequency ≤ 2 per week;
- ★ retention of faeces;
- ★ painful, hard or pebble-like defecation;
- ★ large amounts in the diaper or toilet;
- ★ large faecal mass palpable in abdomen or rectum;
- ★ faecal incontinence ≥ 1 episode per week (if potty trained).

DIAGNOSTIC RECOMMENDATIONS**History**

- ★ The onset and duration of the symptoms.
- ★ Defecation pattern (usual defecation pattern; frequency, amount, shape, consistency; diarrhoea; procrastination; application of methods to promote defecation; incomplete defecation; difficult faecal passage; indications of irritable bowel syndrome).
- ★ Diet (sufficient fluid intake; sufficient fibre intake).
- ★ Causal factors and consequences (pain during defecation; rectal blood loss; use of laxatives and medication with constipation as a side effect; hypothyroidism, diabetes mellitus, pregnancy, Parkinson's disease, multiple sclerosis).
- ★ General symptoms: increasing abdominal pain and vomiting, discomfort, weight loss.

Additional for children:

- ★ Time of first meconium expulsion; transition from breast-feeding to bottle-feeding; faecal incontinence; potty training/defecation at school; parent-child relationship; growth (curve) and development.

Physical examination

- ★ Examine the abdomen, inspect the perianal region, perform a digital rectal examination if indicated (pathology or faecal impaction).

Evaluation

Constipation with an underlying somatic cause:

- ★ discomfort, unexplained weight loss, rectal blood loss, changed defecation patterns (malignancy);
- ★ great deal of abdominal pain, severe distension of the abdomen, lack of peristalsis or drain sounds (ileus);
- ★ use of medication that may cause constipation (opiates, anticholinergics, anticonvulsants, serotonin reuptake inhibitors, bisphosphonates, iron and calcium supplements, calcium antagonists, NSAIDs, diuretics and antacids containing aluminium);
- ★ hypothyroidism, diabetes mellitus, pregnancy, Parkinson's disease, multiple sclerosis;
- ★ prolapse of vagina and/or rectum (pelvic floor pathology);
- ★ meconium expulsion > 48 hours after birth, bloody diarrhoea, bilious vomiting, failure to thrive, fever (Hirschsprung's disease);
- ★ abnormalities of the spinal column or anorectal deformities.

If there is no underlying somatic cause: functional constipation

Consider psychosocial factors: problems at school or within the family, sexual abuse, physical violence.

THERAPEUTIC RECOMMENDATIONS**Education and non-drug recommendations**

- ★ Defecation pattern consistent with age.
- ★ Sufficient fluid intake; sufficient fibre intake; sufficient activity.
- ★ For children: poo journal and toilet training (see the main text of the NHG Guideline).

Drug treatment**Adults**

- ★ Lactulose syrup 670 mg/ml; 15-45 ml or 12-30 g powder in 1-2 doses.
- ★ Macrogol without electrolytes: ≥ 8 years 1-2 sachets of 10 g per day. Macrogol with electrolytes: depending on manufacturer, 1-4 sachets per day (≥ 11 years 1-2 sachets). Faecal impaction: 8 sachets (of 13 g) per day, taken within 6 hours, for a maximum of three days (in the event of reduced cardiovascular function, a maximum 2 sachets per hour) or rectal medication.
- ★ Also consider rectal medication if defecation has not occurred within 3 days of oral treatment for severe symptoms.

Children

Lactulose (syrup 670 mg/ml)	
0-1 month	1-2 times per day 0.5 ml
1 to 6 months	0.6-1 ml/kg/day in 1-2 doses
7 months to 18 years	1-3 ml/kg/day in 1-2 doses

Macrogol	
Without electrolytes	
• macrogol 4000 sachet junior 4 g	depending on age, 1-4 sachets per day. ≥ 8 years: see adult dose
electrolytes	
• macrogol 3350 sachet junior 6.56 g* and macrogol 3350 sachet junior 2.95 g	depending on age and manufacturer, 1-4 sachets per day. ≥ 11 years: see adult dose

* Faecal impaction: 1-1.5 g/kg/day (maximum of 7 days)

Follow-up

- ★ Follow-up 2 weeks after having provided education and non-drug recommendations.
- ★ Follow-up 3 days to 2 weeks (depending on symptoms) after having started medication. Continue treatment if successful, tapering off should be take place in consultation with the patient. Continue drug treatment in children for at least 2 months.

Referral

- ★ Signs of ileus or malignancy: surgeon or internist.
- ★ Insufficient response to treatment: gastroenterologist/internist; child to paediatrician.
- ★ Suspicion of pelvic floor pathology: gynaecologist.
- ★ Suspicion of Hirschsprung's disease or anatomical deformity: paediatrician.
- ★ Support for toilet training: youth health care practitioner or paediatric physiotherapist.
- ★ Severe behavioural problems, developmental disorders or severely disrupted parent-child interaction with regard to defecation: psychologist.