

Supplement 1. Quick reference card for general practitioners

REFERENCE CARD OF NHG GUIDELINE HIGHLIGHTS

Definition, epidemiology and diagnostics

Functional abdominal gastrointestinal diseases are ‘*abdominal pain for which the general practitioner (GP) does not presume underlying tissue damage, somatic causes, or metabolic or anatomic abnormalities based on anamnesis and physical examination*’. The two most important forms are functional abdominal pain and irritable bowel syndrome.

Per norm practice (practice size of 2095 patients) per year, a GP sees on average 10 new children with functional abdominal complaints, more girls than boys. This corresponds with 90% of the children with chronic abdominal pain. Abdominal complaints lasting more than one week increases the chance of functional abdominal pain.

Indication for somatic cause:

- Diarrhoea > 10 days → consider faeces test for parasites
- Indication celiac disease → serologic test or referral to paediatrician
- Indication irritable bowel disease → erythrocyte sedimentation rate, leucocyte or haemoglobin test
- Possible pregnancy → pregnancy test

Absence of indication for somatic cause:

- Clinical urine tests to rule out urinary tract infection

Other diagnostics are not recommended.

Rome III criteria in NHG guideline

Functional abdominal pain

1. Recurrent or continue abdominal pain;
2. Abdominal pain ≥ 1 time per week during ≥ 2 months prior to presentation
3. No indication for anatomic, inflammatory, metabolic or neoplastic processes that can explain the abdominal pain

Irritable bowel syndrome

- Definition: abdominal pain ≥ 1 time per week during ≥ 2 months, accompanied 1 on 4 times with ≥ 2 of the following:
1. Improvement with defecation
 2. Changed defecation frequency
 3. Changed stool shape

NHG guideline treatment

Communication – education – reassurance

Education and non-pharmacological treatment:

- Actively involve child and parents/guardians during recovery and policy, adhere to their ideas
- Explain that the gut can oversensitively react to a variety of incentives, that thoughts and feelings can influence the gut and abdomen, and vice versa, abdominal pain influences the emergence of fear and other emotions, and that functional abdominal pain is not a precursor of a dangerous or life-threatening condition.
- Stimulate a balanced diet. Do not recommend extra dietary fibre intake.
- Formulate realistic treatment goals targeting on handling the pain and not on pain disappearance.
- Promote returning to normal activities and regular school attendance.

- Stimulate parents/guardians to pay less attention to the abdominal complaints.
- Choose for complain registration in case of insufficient improvement or recurrent complaints.

Follow-up:

- Follow-up 4 weeks after baseline consultation: discuss the treatment goal and answer questions.
- Advise to return if the character or seriousness of the abdominal pain changes, or if the influence of complaints on activities of daily life increases.

Referral:

- In case of serious persistent functional abdominal pain: discuss additional diagnostics and possible referral with paediatrician.

Hypnotherapy

Medical hypnotherapy is a technique which learns children to gain more control over complaints such as pain and fear, using their own thoughts and fantasies. Research in secondary and tertiary care showed that hypnotherapy by self-exercises helps in 70% of the children.

Supplement 2. International Classification of Primary Care codes for retrospective search

D01	Abdominal pain/cramps general
D02	Abdominal pain epigastric
D06	Abdominal pain localized other
D11	Diarrhoea
D12	Constipation
D18	Change in faeces/bowel movements
D27	Fear of digestive disease other
D29	Digestive symptom/complaint other
D93	Irritable bowel syndrome
D99	Disease digestive system other

Supplement 3. Informed consent forms

CONSENT FORM PARTICIPANTS

*For participants aged 12-17 years**

Please fill in the highlighted parts.

Study on treatment of functional abdominal pain in children (ZelfHy study)

- I have read the patient information letter. It was possible to ask questions. My questions are sufficiently answered. I had enough time to decide whether I want to participate.
- I know that my participation is voluntary. I know I can decide at any moment to end my participation. I know I do not have to provide a reason.
- I give consent for retrieving my data from my general practitioner.
- I give consent to collect and use my data for the purpose of this research.
- I give consent for collecting my usage data from the website. This includes the number of logins on the website, and which exercises I listened to.
- I know that some persons can look at my data. These persons are mentioned in the patient information letter. I agree that these persons can look at my data.
- I agree to participate in this research.

- I do
 do not
give consent to save my data for a maximum of 15 years and use my data for comparable scientific research in the future.

- I do
 do not
give consent to be approached for future research.

First and last name: _____

Signature: _____

Date: __/__/__

*Parents of children aged 12-15 years also have to sign 'Consent form Parents/Guardians'

CONSENT FORM PARENTS/GUARDIANS*For parents of participants aged 7-15 years**

Please fill in the highlighted parts.

Study on treatment of functional abdominal pain in children (ZelfHy study)

I have been asked to give consent for my child's participation in this medically scientific research.

Name participant (child): _____ Date of birth: __/__/____

- I have read the patient information letter. It was possible to ask questions. My questions are sufficiently answered. I had enough time to decide whether me and my child want to participate.
- I know that my participation is voluntary. I know I can decide at any moment to end my child's participation. I know I do not have to provide a reason.
- I know that when my child resists this research, my consent for further participation will expire.
- I give consent for retrieving my child's data from my child's general practitioner as mentioned in the patient information letter.
- I give consent to collect and use my child's data for the purpose of this research.
- I give consent to retrieve my child's usage data from the website. This includes the number of logins on the website, and which exercises my child listened to.
- I know that some persons can look at my child's data. These persons are mentioned in the patient information letter. I agree that these persons can look at my child's data.
- I agree that me and my child participate in this research.

- I do do not give consent to save my child's data for a maximum of 15 years and use my child's data for comparable scientific research in the future.

- I do do not give consent to be approached for future research.

Parent/guardian 1

First and last name: _____

Signature: _____

Date: __/__/____

Parent/guardian 2

First and last name: _____

Signature: _____

Date: __/__/____

*When the child is younger than 16 years, the parents or guardians sign this form. Children between 12 and 15 years also have to sign 'Consent form Participants'