Abdominal migraine

Migraine-type attacks in which tummy pain is the main symptom.

> **i** Abdominal migraine causes distinct attacks of significant tummy pain, usually in the middle or around the belly button, with good or near-usual health between attacks. A headache is not required.

What does an attack feel like?

Pain can stop a child's usual activity and last hours or sometimes longer. Pallor, loss of appetite, nausea or vomiting may occur. Some children prefer a dark, quiet room. Episodes tend to have a recognisable pattern for that child.

How is it related to migraine?

It belongs to the migraine spectrum and often occurs in families with migraine. Some children later develop migraine headaches. Sleep disruption, missed meals, dehydration, illness, stress or excitement can be triggers. Having a trigger does not mean a child caused the attack.

How does a gut-brain disorder fit?

It is often discussed within Disorders of Gut-Brain Interaction (DGBI). We use gut-brain disorder as the simpler term. The exact migraine mechanism is not fully understood; altered signalling is not the same as visible bowel injury.

Pain-predominant or vomiting-predominant?

In abdominal migraine, pain dominates. In cyclical vomiting syndrome, repeated vomiting dominates. IBS is more closely tied to changes in stools or bowel motions. These differences guide treatment; a clinician assesses the whole pattern.

Take the symptoms seriously

Your child's pain is real. Treatment can support the migraine system, the gut and the child's response to attacks. Between episodes, normal eating, school and activity should be encouraged when medically safe.

The gut and brain during an attack

A helpful model - not a test that proves the diagnosis.

The gut has its own nerve network, sometimes called the “gut brain”, which communicates with the main brain. Migraine can alter how body signals are processed. In some children, sensitive gut nerves and heightened pain responses contribute. Not every child has every mechanism shown below.



Messages travel both ways - treatment can target both ends.

Worry • poor sleep • pressure Anticipating another pain episode Can turn up pain processing

Constipation • gas • stretching Changes after a gut infection Can turn up gut sensitivity

Visceral hypersensitivity: a sensitive tummy

“Visceral” means the internal organs. “Hypersensitivity” means extra-sensitive. A normal amount of gas or a meal stretching the gut may feel painful, rather like sunburnt skin hurting with a light touch.

Brain sensitisation: the volume is turned up

With repeated pain, the brain and spinal cord can become quicker to notice gut signals and amplify them. Fear of another episode and poor sleep can keep this circuit alert. This is an automatic nervous-system response, not a choice or a parent’s fault.

Assessment and when to investigate

A typical recurring pattern helps, but concerning features change the plan.

How is it diagnosed?

The clinician looks at attack duration, associated symptoms, wellness between episodes, migraine history, growth and examination. No blood test or scope directly proves abdominal migraine. Selected tests may be needed to exclude a plausible alternative before making the diagnosis.

When can endoscopy be important?

A scope can matter if bleeding, swallowing symptoms, persistent vomiting, weight loss, abnormal blood or stool results or another concern suggests gastrointestinal disease. It is not routinely needed for a child with a typical pattern and reassuring assessment. A normal scope does not make the pain unreal.

When does the pattern need reassessment?

Pain that becomes continuous or progressively worse, consistently focal pain, poor growth, blood in stool, persistent fever or diarrhoea, or unusual neurological symptoms need review. A child who is not recovering between episodes may need the diagnosis reconsidered.

! Urgent care: green or bloody vomit, severe new or localised pain, a swollen or rigid abdomen, fainting, marked dehydration, confusion or a very unwell child. Do not assume a new acute illness is another migraine attack.

Prepare a short diary

Record date, duration, location of pain, pallor, nausea or vomiting, sleep, meal timing, possible trigger, treatment and missed activities. A diary helps recognise the pattern without requiring constant pain checks.

TRUSTED INFORMATION AND SOURCES

RCH - migraine, including abdominal migraine ↗

RCH - chronic abdominal pain assessment ↗

Treating an attack and preventing another

Build a child-specific plan with the treating clinician.

At the start of an attack

Use a quiet, dim room, rest and small drinks if tolerated. Give the agreed rescue treatment early. Paracetamol or another clinician-selected pain medicine may help; an anti-nausea medicine can be used when prescribed. Avoid ibuprofen during dehydration unless explicitly advised. Opioids are not routine migraine treatment.

Migraine-specific rescue medicines

A triptan may be considered by a specialist in selected children. Direct evidence for abdominal migraine is sparse, so age, route, migraine history and risks matter. Do not use another family member's migraine prescription.

What if symptoms do not settle?

Use your clinician's escalation instructions. Seek review early if fluids cannot be retained, pain is unusually severe or the episode differs from usual. Do not keep repeating rescue doses beyond the prescribed limit.

i Discuss and write down your child's rescue plan First warning signs: _____ Medicine and timing: _____ When to seek care: _____ Treating team / contact: _____

Preventing abdominal migraine

Consider a trial when attacks repeatedly disrupt life.

When prevention may be worthwhile

If attacks are frequent, severe or repeatedly disrupt school and family life, a preventive trial may be considered. Options include cyproheptadine, propranolol or pizotifen. Direct abdominal-migraine evidence is limited: pizotifen has a very small placebo-controlled trial; support for the others relies mainly on small studies and migraine practice.

Amitriptyline and side effects

Amitriptyline is sometimes used selectively when other approaches have not helped, but direct paediatric abdominal-migraine evidence is weak. Cyproheptadine or pizotifen may cause sleepiness and weight gain. Propranolol may be unsuitable with asthma and can lower pulse or blood pressure. Amitriptyline needs heart-risk, interaction and mood monitoring and secure storage.

Food, constipation and gut treatments

Treat constipation if present; it can add another source of pain. Probiotics and peppermint evidence mainly concerns IBS or functional abdominal pain, not preventing abdominal migraine. Low FODMAP is not routine for this episodic migraine pattern. Avoid broad food exclusion unless a consistent trigger has been identified and assessed.

i Agree on a measurable goal, review date and side-effect plan. No medicine guarantees success. Doses and choices are individual; this is not a prescription chart.

Small placebo-controlled pizotifen trial ↗

Supporting your child between attacks

Protect routines, confidence and ordinary childhood activities.

Keep the foundations steady

Regular sleep, meals and fluids are useful. Avoid long fasting and address clear individual triggers without making life overly restricted. Enjoyable movement and predictable routines help general wellbeing.

CBT and relaxation

Therapy can help fear of attacks, coping and return to activity. Gut-directed CBT or hypnotherapy may help overlapping ongoing gut pain, but their strongest evidence is for IBS and functional abdominal pain rather than abdominal migraine.

Brisbane support

The Gut-Brain Clinic in Coorparoo and The Gut Centre in Paddington/telehealth provide gut-focused services. Confirm age suitability and whether the practitioner has experience with migraine-related symptoms. Nerva research is mainly in IBS; it is not an established abdominal-migraine prevention program.

The Gut-Brain Clinic ↗
The Gut Centre ↗

School and the longer-term outlook

Give school a rescue plan and quiet rest option. Encourage attendance between attacks. Some children improve with age; others later have headaches. Review attacks and daily participation.

> “ What to tell your child “Migraine can cause tummy pain as well as headaches. We believe you and have a plan for an attack. Between attacks, we will help you keep doing the things you enjoy.”

RCH - migraine information ↗
Migraine Australia - abdominal migraine ↗



Your feedback is welcome

If you would like to leave a Google review about your experience, scan the QR code.

Please avoid including your child's name or private health information in a public review.