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ISSN 2348-0416 USA CODEN: JASRHB

# Journal of Applied Science And Research, 2017, 5 (3):102-105

(http://www.scientiaresearchlibrary.com/arhcive.php)

## Abdominal migraine: My migraine hurts my stomach

Sofia Oubaha(1), Houda Ouarrach\* (2), Fatima Pratic(2), Zohour Samlani(2), Khadija Krati

**(2)** 

(1) Service de physiologie, Université Cadi Ayyad, Faculté de Médecine et de Pharmacie de Marrakech, Marrakech. Maroc.

(2) Service de gastro-entérologie, CHU Mohammed VI, Marrakech. Maroc.

#### **ABSTRACT**

Abdominal migraine, an episodic syndrome poorly understood so far, is often confused with other forms of recurrent abdominal pain. Requiring elucidation of its pathogenesis for better management.

What prompted us to ask some questions:

What is abdominal migraine?

What is its pathogenesis?

*How to make the diagnosis?* 

And what appropriate treatment?

**Keywords**: Abdominal migraine. Paroxysmal abdominal pain. Triggering factors. treatment.

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## **INTRODUCTION**

Abdominal migraine is characterized by unpredictable paroxysms of acute abdominal pain. The headaches may or may not be associated, and the victims are free of abdominal discomfort between seizures. The attacks may be preceded or accompanied by other symptoms that may include vomiting, pallor, hot flushes, anorexia, phonophobia and photophobia. Triggers include stress, food, sleep, or travel. (1) (2)

Various clinical findings suggest a possible relationship between migraine and the digestive system:

- Food aversion, nausea, gastric intolerance often occurring at the onset of the crisis and extending from the headache phase of the seizure to vomiting.
- Frequent allegation of dyspeptic disorders in migraineurs outside or at the onset of seizures.
- Description by the patients of the role promoting excess diet, diet gaps, and certain foods or drinks.

What prompted us to ask some questions:

What is abdominal migraine?

What is its pathogenesis?

How to make the diagnosis?

And what appropriate care?

The term "abdominal migraine" was first invented in 1922 to describe the experience of abdominal pain in the absence of headaches. However, until recently the existence of abdominal migraine as a distinct disorder was seriously questioned and abdominal migraine was often confused with other forms of recurrent abdominal pain (3).

## I) Physiopathology: (3)

The pathophysiology of abdominal migraine remains unknown. Several hypotheses have been studied to determine its pathophysiology (3): factors including IgE-induced food allergy, intestinal mucosal immune responses, phenol-sulfotransferase M and P, which are enzymes of catecholamine catabolism and Monoamines and the permeability of the mucosal surface of the intestine.

Weydert, Ball and Davis (4) discussed the relationship between the intestine and the central nervous system (CNS). Derived from the same embryological tissues, the enteric nervous system and the CNS have direct effects on each other. These researchers proposed that stress increases CNS excitation, during which neuropeptides and neurotransmitters are released. This situation, in turn, leads to a disorder of the gastrointestinal system.

Based on a study of twins on the conditions of pain, it has been shown that genetics play a role in migraine (50%) and irritable bowel syndrome (25%): which makes us suspect that Abdominal migraine is an unknown genetic syndrome (5).

## II) Diagnosis:

In 2004, the International Headache Society (IHS) published the International Classification of Headache Disorders (ICHD) and included abdominal migraine in section 1.3. This recognition was based on evidence suggesting that periodic abdominal pain occurring in the absence of headache may be a likely migraine phenomenon.

The ICHD formally defined abdominal migraine as "an idiopathic disorder seen primarily in children as moderate to severe recurrent attacks of median abdominal pain associated with vasomotor symptoms: nausea and vomiting, 1-72 hours and with the normality between episodes" (6). These episodes do not include headaches and periods between episodes are asymptomatic and prolonged. The pain is moderate to severe and associated with nausea and vomiting. The diagnostic criteria for the ICHD are listed in Table 1.

Abdominal migraine has also been recognized by the community of gastroenterology, and has been included in the Rome IV criteria for functional gastrointestinal disorders (7).

The diagnosis of abdominal migraine according to the IHS or the Criteria of Rome IV is made only after the exclusion of other causes of periodic abdominal pain, namely inflammatory bowel disease and disaccharide intolerance.

#### III) Support:

• Abortion treatment:

View of the rarity of studies on its management Many of the recommendations for abdominal migraine here have been extracted from pediatric migraine (8).

Once the diagnosis of abdominal migraine is established, treatment should begin with simple analgesia. Antiemetic treatment may be associated if abdominal migraine is associated with nausea and vomiting

5HT 1A / 1D - triptans agonists have been shown to be effective in the treatment of migraine, but their role in abdominal migraine is uncertain. Of this class, nasal Sumatriptan is the most widely studied, it has the most consistent results in proving its efficacy in the treatment of abdominal migraine according to a published case report (9). Almotriptan has also recently been studied in adolescents with migraine and shown to be effective.

• Prophylaxis:

## **Prevention of triggering factors:**

Once identified, some triggering factors such as bright light, poor sleep, travel and prolonged fasting should probably be avoided or minimized.

The role of the diet is not clear. However, an immunoglobulin G (IgG) -based elimination regimen appears promising in reducing migraine episodes in patients with both migraine symptoms and irritable bowel syndrome.

## **Prophylactic treatment:**

Approaches to prophylactic treatment include the use of beta-blockers, cyproheptadine, tricyclic antidepressants, and there are some scattered case studies of flunarizin (10).

## **CONCLUSION**

Abdominal migraine is an episodic syndrome that is poorly understood, its recognition by the IHS and the Rome Foundation should help facilitate future research on the pathophysiology of this pathology. Further studies on epidemiology, pathogenesis and treatment are needed to better characterize and manage this chronic disorder.

#### **Conflicts of interest**

The authors do not declare any conflict of interest

**Table 1 :** International Classification of Headache Disorders (ICHD): diagnostic criteria for abdominal migraine (6).

Dia	gnostic criteria for abdominal migraine according to IHS (International Headache Society):
Α.	At least 5 crises meet criteria B and D.
В.	Painful attacks lasting between 1 and 72 hours.
C.	Abdominal pain is characterized by:
D.	- medial, periumbilical or poorly localized localization,
E.	- deaf or irritative character,
F.	- moderate or severe intensity.
G.	During abdominal pain, at least 2 of the following 4 characteristics:
H.	- loss of appetite,
I.	- nausea,
J.	- vomiting,
K.	- pale.

L. Exclusion by history, clinical examination, and by complementary examinations, of a disease causing symptoms.

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