

CASE REPORT

TODDLER WITH RECURRENT ABDOMINAL PAIN: MIGRAINE?

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ABSTRACT: Abdominal migraine is a migraine variant, causing chronic idiopathic recurrent abdominal pain in 4-15% of children. It is usually seen between the ages of seven to twelve years and is more common in girls, with peak prevalence at the age of ten years. We report a 3 year old girl suffering from recurrent abdominal pain since 1½ years of age, who underwent extensive investigations as well as diagnostic laparotomy with appendectomy, and was ultimately diagnosed to have abdominal migraine. She responded well to the prophylactic drug Flunarizine.

KEYWORDS: Recurrent abdominal pain, abdominal migraine, young age.

CASE REPORT: A three year old girl was referred with the complaint of episodes of severe abdominal pain since one and half years. It was dull aching, predominantly per umbilical, usually in the evening, intermittent, lasting for 1 to 2 hours, getting relieved on its own. Initially, there were 1 to 2 episodes per week and then the frequency increased to 2 episodes every alternate day. During the attack the child had anorexia, nausea, irritability and insomnia.

There was no history of vomiting, loose stools or fever. She was completely symptom free between two episodes. There was no history of Koch's or Koch's contact and she had gained adequate weight with no developmental delay. There was no history of migraine in either parent. The patient was being investigated since one and half year.

Complete blood count, liver function test, renal function test, urine, stool routine, X-ray abdomen, USG Abdomen, CT abdomen and barium meal study were all within normal limits. She did not respond to antacids and analgesics during the acute episodes and had received anthelmintic and antibiotics on multiple occasions.

She had also undergone diagnostic laparoscopy with appendectomy four months prior to presenting to us with persisting complaints even after the surgery. On examination, the patient was conscious, alert, active and cooperative. Her vital parameters and anthropometry were within normal limits. There was no pallor, icterus, cyanosis, clubbing, lead lines, lymphadenopathy or edema. Systemic examination did not reveal any abnormality apart from the operative scar mark on the abdomen.

A differential diagnosis of lead poisoning, acute intermittent porphyria and abdominal migraine were considered and the patient was investigated for the same. Blood lead level was 5mcg/dl. Urine porphobilinogen was negative. EEG was suggestive of epileptiform activity with spike pattern over right hemisphere and the diagnosis of abdominal migraine was made.

During the ward stay she had a severe attack of abdominal pain and she was loaded with injection valproic acid at 20 mg/kg. In view of no response in 24 hours, she was started on oral flunarazine to which she responded. She was advised to continue tablet Flunarizine 2.5 mg twice daily and valproic acid was omitted. She is asymptomatic for the past one year.

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DISCUSSION: Abdominal migraine (AM) is a subtype of recurrent abdominal pain, most commonly seen in children¹. It affects 1-4 % of children² and is the causative factor in about 4-15% of children with chronic idiopathic recurrent abdominal pain.³ Presenting symptoms include acute, incapacitating, non-colicky per umbilical abdominal pain that lasts for one or more hours. Pallor, anorexia, nausea, vomiting, photophobia, or headache may be associated with the episodes, and a family history of migraine headaches is often noted.²

AM is a migraine variant which is usually seen between the ages of seven to twelve years and is more common in girls, with peak prevalence at the age of ten years. As against this, our patient though a girl child is probably the youngest case presenting at eighteen months of age. The diagnosis is mainly clinical after the exclusion of other causes of recurrent abdominal pain. Our patient fulfills the Rome III criteria for functional gastrointestinal disorders which are widely used to diagnose AM.⁴

EEG changes have also been reported in AM and were present in our case.^{5,6} Abu Arafah et al compared the prevalence and clinical features of AM with migrainous headache and suggested that they have a common pathogenesis as the social, demographic, triggers and relieving factors were similar.¹ Intravenous valproic acid was found to be effective in aborting abdominal migraine by Tan et al⁷, however, our patient did not respond to it.

A 51% reduction in duration of acute attack of AM and 61% reduction in frequency were demonstrated with flunarizine by Kothare et al.⁸ Our patient responded to flunarizine and she has been asymptomatic for the past one year. Other drugs like pizotifen, propranolol and cyproheptadine have also been found to be effective for prophylactic use in AM¹. Recent studies do suggest that infantile colic can be a manifestation of childhood migraine and later may manifest as migraine with or without aura.⁹

In fact some studies have proved that infant colic is an early life expression of migraine, especially if associated with maternal history of migraine.^{10,11} Hence, before surgical interventions, patients with recurrent abdominal pain should be assessed for migraine variants especially if there are no clinical signs of an acute abdomen.

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