Abdominal and Lower Back Pain in Pediatric Idiopathic Stabbing Headache

**abstract**

Idiopathic stabbing headache (ISH) is a primary headache syndrome characterized by transient, sharp, stabbing pains located in the first division of the trigeminal nerve. Reports of pediatric ISH are rare, and extracephalic pain in pediatric ISH is extremely rare. Here we report the case of a 7-year-old male patient suffering from frequent, short, stabbing headache, which was occasionally associated with abdominal and lower back pain. Various investigations were normal. He was diagnosed with ISH, and valproic acid was administered to relieve his headache and accompanying symptoms. Our case demonstrates that abdominal and lower back pain may occur in pediatric ISH. This case may provide new evidence linking ISH and migraine by showing that extracephalic symptoms accompanying ISH are similar to those of migraine. We hypothesize that the mechanism underlying the headache and abdominal and lower back pain associated with ISH may be similar to that of a migraine headache. Accumulating additional cases by asking specific questions regarding the presence of the unusual symptoms presented in our case may help to establish a detailed clinical profile of these unfamiliar and peculiar symptoms in the pediatric ISH population. *Pediatrics* 2014;133:e245–e247

**AUTHORS:** Yosuke Kakisaka, MD,a,b Tomoichiro Ohara, MD,a Naomi Hino-Fukuyo, MD,b Mitsugu Uematsu, MD,b and Shigeo Kure, MDb

aDepartment of Pediatrics, South Miyagi Medical Center, Ogawara, Japan; and bDepartment of Pediatrics, Tohoku University School of Medicine, Sendai, Japan

**KEY WORDS**

abdominal pain, back pain, idiopathic stabbing headache, valproic acid

**ABBREVIATIONS**

ISH—idiopathic stabbing headache

VPA—valproic acid

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Address correspondence to Yosuke Kakisaka, MD, Department of Pediatrics, Tohoku University, Seiryo-machi 1, Aoba-ku, Sendai, Japan 980-8574. E-mail: kakisuke@mu.biglobe.ne.jp

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Idiopathic stabbing headache (ISH) is a primary headache syndrome classified under “other primary headaches” in the International Classification of Headache Disorders, Second Edition. The pain is characterized as a transient, sharp, stabbing pain located in the first division of the trigeminal nerve. Few studies have investigated pediatric ISH. Several peculiar symptoms, such as extracephalic pain, associated with ISH have been reported in adult cases but not in the pediatric population. We report a case of a pediatric patient with ISH associated with abdominal and lower back pain.

CASE REPORT

A 7-year-old male patient presented at our hospital with severe stabbing headache in the left temporal region. Single episodes of stabbing pain several seconds in duration occurred about once a week and had begun 5 months before presentation. He was completely symptom-free between attacks. Before the initial visit, the attacks became more frequent, increasing to once or twice daily. Additionally, the headache was associated with antecedent abdominal pain in the epigastric to periumbilical region with or without bilateral lower back pain in approximately one-third of events. The extracephalic pain appeared ~20 seconds before headache onset and persisted in an intense manner, interfering with the patient’s activities. He finally became incapacitated by simultaneous pain in multiple locations along with the stabbing headaches. Although he noted occasional hypersensitivity to sound during daily activity, his headache was not associated with nausea, vomiting, photophobia, osmophobia, or cranial autonomic symptoms (ie, lacrimation, conjunctival injection, eyelid edema, nasal congestion). The patient’s mother had menstruation-related migraine headaches, but his history was not remarkable. The results of neurologic and physical examinations between attacks were normal. Laboratory examination and brain computed tomography results were normal. The patient was suspected to have idiopathic stabbing pain and administered valproic acid (VPA; 250 mg/day = 10 mg/kg/day) based on a previous report. All symptoms resolved within a couple of days after VPA administration. He stopped the VPA after 2 weeks of medication and has been symptom free.

DISCUSSION

Our case demonstrates that abdominal and lower back pain may occur in pediatric patients with ISH. The clinical course of our case, the appearance and disappearance of headache, and the associated extracephalic pain before and after VPA administration suggest that the mechanism mediating the abdominal and lower back pain may share a common pathway with that underlying ISH. Given that migraines have been associated with cutaneous allodynia or corpalgia and abdominal pain and that a genetic predisposition may underlie ISH, we hypothesize that the mechanism underlying the pain in our case is similar to the increased responsiveness (sensitization) of central pain neurons reported in migraine headaches.

Soriano et al examined the clinical profiles of 83 pediatric ISH cases. They reported that some ISH patients had (1) a history of symptoms suggesting the presence of cyclic vomiting syndrome or abdominal migraine or migraine equivalent and (2) associated symptoms such as photophobia and nausea. Their findings support previous reports suggesting that patients with ISH have a genetic predisposition for migraines. Our case may provide new evidence connecting ISH and migraine by showing that extracephalic symptoms accompanying ISH are similar to those of migraine.

In contrast to pediatric ISH patients like ours, only a few reports of visceral pain in adult patients with ISH are known. This may be related not only to the rarity of ISH but also to the peculiar age-dependent nature of migraine and its symptoms. In other words, pediatric patients with migraine suffer recurrent abdominal pain years before the typical migraine headache appears, although the details of this trajectory remain unclear.

We believe that accumulating cases by asking specific questions regarding the presence of the unusual symptoms presented in our case may help to establish a detailed clinical profile of these unfamiliar and peculiar symptoms in the pediatric ISH population.

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