Pediatric Case of Exercise Related Transient Abdominal Pain and Analysis of Current Literature

Jingping Wang
Department of Anesthesia and Critical care and Pain Medicine Massachusetts General Hospital, 55 Fruit St. GRJ 4-420
Boston, MA 02114, USA
E-mail: JWANG23@PARTNERS.ORG

ABSTRACT
Exercise-related transient abdominal pain (ETAP) is an ailment commonly known to athletes as stitch and detrimental to their performance although it is thought of as benign and self-limiting. It may be stabbing or sharp when severe, aching, pulling or cramping when less intense, recurrent, and resistant to treatment. To date, ETAP remains under analyzed and under reported in the medical literature. There is no direct evidence of the cause of this ailment. Most of the patients reported in the previous literature were adult patients. This case report of an 11-year-old otherwise healthy female and subsequent analysis of literature, will present a contemporary understanding of ETAP, including the various ideas about the etiology, the epidemiology associated with it, and strategies to manage and prevent this frustrating disorder.

Introduction
Exercise-related transient abdominal pain (ETAP) is an ailment commonly known to athletes as stitch and it is thought of as benign and self-limiting. It was first described in 1951 and has been more carefully studied over past 15 years. Approximately 40–60% of runners at some time experience the performance-diminishing condition of ETAP Stitch, stitch in the side, side ache, side cramp and subcostal pain are terms that have been used to describe ETAP. It may be stabbing or sharp in character when severe; and aching, pulling or cramping in character when less intense. It can be recurrent, and resistant to treatment. Although widely known, ETAP remains under analyzed and under reported in the medical literature. There is no direct evidence for the pathophysiology of ETAP. Several theories have been presented to illustrate the mechanism responsible for it. These theories include stress being placed on the visceral ligaments, ischemia of the diaphragm leading to insufficient oxygen supply, muscle cramp, gastrointestinal ischemia, and the irritation of the parietal peritoneum.

We present a case report of ETAP in an 11-year-old otherwise healthy female and our management of her ailment to alleviate her symptoms. We also analyze the current literature on ETAP. We present the etiology and epidemiology of ETAP, and strategies to manage this ailment.

Keywords: Transient abdominal, benign, self-limiting, hiking, horseback riding.