

7 Ways to Fend Off the Side Stitch

By Dr. Hamid Sadri
[The Sport Factory](#)

Many athletes, especially [runners](#), are all too familiar with the pain that sometimes appears around the lower rib cage or side of the abdomen during an otherwise perfectly fine bout of exercise. Yes, the dreaded side stitch otherwise known as exercise-related transient abdominal pain (ETAP). Even though ETAP can occur during any type of exercise, reported statistics have shown it to be more common with runners and other exercise activities that involve up-and-down (running, horseback riding) and, to a lesser extent, rotational motions (swimming). Sports that do not involve these particular movement patterns such as cycling or rowing have been much less likely to cause these symptoms.

To date, there is no exact scientific evidence proving how or why this phenomenon occurs. However, there are a multitude of theories and suggestions that seem to hold some validity and offer a reasonable explanation for this condition. Accordingly, some recommendations are offered, which may help ease the symptoms related to ETAP. Currently there are five theories on what could be the cause of ETAP.

A. Lower back hyper extension (excessive arching) during downhill running. This puts excessive pressure on the spine and can lead to pain.

B. Peritoneal ligament(s) stress. These are ligaments that help attach the internal organs and hold them in their respective positions. The theory is that some of these ligaments get stretched during exercise and cause pain.

C. Parietal Peritoneum Irritation. This is the soft tissue lining of the abdominal wall and the pelvic cavity. It also surrounds most of the internal organs located in the abdomen. It is proposed that exercise may cause friction between these layers of tissue and result in pain. An example is exercising on a full stomach (increased weight/volume = increased tissue friction).

D. Postural/spinal deviations. There are a group of spinal nerves that supply the torso. It is proposed that spinal deviations (increased curvatures, scoliosis, etc.) can result in irritation to these nerves, or possibly the joints of those affected vertebrae, which will lead to pain.

E. Diaphragmatic ischemia. The theory (no longer widely accepted) is that as the blood is diverted to the skeletal muscles while exercising, it reduces the flow of blood to the diaphragm, which results in pain and cramping.

Regardless of the cause, ETAP can dramatically affect an athlete's performance, decreasing their ability to train or compete at their best. Here are several suggestions that may help the athlete cope with this condition or possibly resolve it altogether.

1. Promote diaphragmatic (belly) breathing. Lie on your back and place a phone book, a small bag of rice, or any other like object that would safely provide some resistance on the abdomen. Try to inhale by pushing the belly out and exhale by relaxing the abdominal muscles, allowing the weight of the object to help push the air out of your lungs. This should help train you to breathe properly by using your diaphragm instead of your chest muscles. Practice this regularly as it takes time to develop new habits.

2. Change your stride-breathing patterns. Most athletes seem to follow a two-to-one stride-breathing pattern. This means that they take one full breath for every two full strides. In doing so,

they tend to subconsciously time their exhalation with either the right or the left leg hitting the ground. Changing the exhalation timing from one side to another may help resolve the pain caused by ETAP.

3. Strengthen your core. Improved [core strength](#) is known to help reduce the occurrence of ETAP.

4. Correct spinal dysfunction. A visit to your favorite chiropractor or physical therapist may help to detect and correct many spinal dysfunctions.

5. Improve/change eating and drinking habits. Avoid heavy meals before exercise, especially foods that are high in protein. [Hydrate](#) by sipping rather than chugging your fluids. When hydrating during physical activity, avoid drinks that have a very high concentration of acids, sugars (carbs) or salts as they result in a reduction of gastric emptying.

6. Continue training. Persistence does pay off. It has been shown that ETAP tends to decrease as one continues to train.

7. See your family physician. If all else fails, visit your doctor and have them rule out other possible health conditions that may require medical attention.

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