

The median arcuate ligament syndrome (MALS) is a cause of chronic abdominal pain affecting both children and adults alike. Chronic abdominal pain is a very common condition that can have significant negative, long-term psychosocial consequences, including increased risk for anxiety, school and work absences, poor functional capacity, and a poor quality of life. While the exact cause of the pain is unknown, compression of the celiac artery and/or the celiac plexus nerves by the diaphragm can result in pain that is worsened with eating or sometimes with exercise. Other symptoms include nausea and weight loss. In some patients the symptoms can be devastating and can lead to erroneous diagnoses of an eating disorder, psychiatric conditions, or functional abdominal pain (e.g. irritable bowel syndrome, abdominal migraine). The diagnosis is made based on a combination of the clinical symptoms and radiology imaging. There is a surgical procedure that can be performed that is effective in approximately 60-80% of patients. Compression of the celiac artery by the median arcuate ligament is a poorly understood vascular compression syndrome involving the celiac artery and celiac nerve plexus that results in upper abdominal pain (frequently made worse with eating), weight loss, nausea and vomiting. Sometimes a doctor may hear a soft whooshing sound with a stethoscope (bruit) over the upper abdomen that may mean there is a vascular blockage. Some patients who are athletes may experience recurrent upper abdominal pain that is brought on by moderate to intense cardiovascular work outs. Additional symptoms associated with the diagnosis, but frequently indicative of other medical problems include palpitations (hearing or feeling your own heartbeat), chest pain, diarrhea, constipation, and difficulty sleeping. The characteristic MALS patient is more likely to be young adult female, which is consistent with demographic characteristics of other chronic abdominal pain (CAP) patients. However, given the wide distribution of celiac artery compression, the syndrome affects both young and old as well as women and men.