


# MEDIAN ARCUATE LIGAMENT SYNDROME PRINTABLE FILE

BY : NATIONAL MALS FOUNDATION

 [www.malsfoundation.org](http://www.malsfoundation.org)

 P.O. Box 1292 Dedham, MA 02027

Published: June 1, 2024

## WHAT IS MALS?

MALS is a condition that happens when the Median Arcuate Ligament pushes down on the celiac artery and/or the nerves around the artery. This makes it hard for blood to flow normally. The median arcuate ligament attaches to your diaphragm which is a muscular structure in your upper belly that moves up and down when you breathe. MALS can lead to awful GI symptoms. Most patients have their symptoms increase after eating, drinking, and/or exercising. It's not a simple tummy ache.

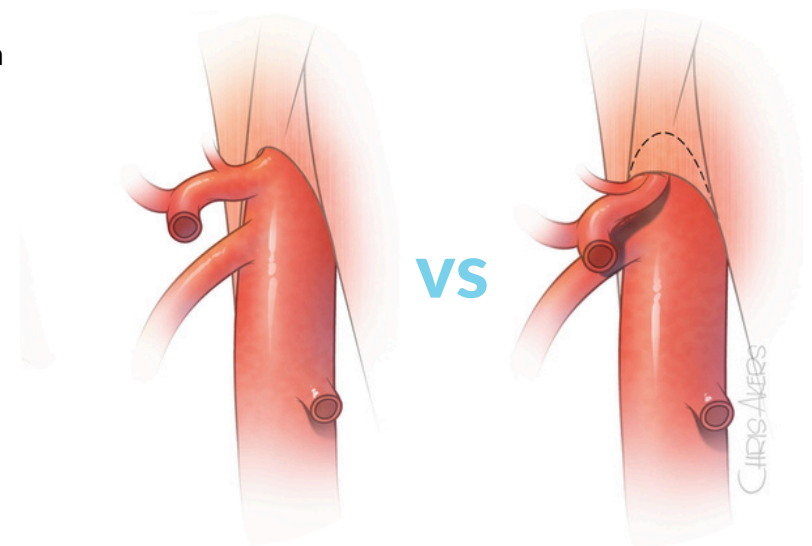
## MOST COMMON SYMPTOMS:

- Epigastric Pain
- Postprandial Pain
- Chest Pain
- Radiating Flank Pain
- Back Pain
- Blood Pressure Issues
- Pulse Issues
- Nausea
- Diarrhea
- Constipation
- Bloating
- Vomiting
- Weight Loss

## HOW TO DIAGNOSE MALS:

A History & Physical (H&P) are important tools helpful in the diagnosis process. Physical examination may activate tenderness in the epigastric region when palpated. The Doctor may hear a whooshing sound known as an abdominal bruit or thrill in the same epigastric area along with listening for bowel sounds. Observations may include weight loss and malnutrition may be evident. Once MALS is suspected, a diagnostic workup is initiated to include various tests indicative of a diagnosis of MALS and rule out cardiovascular and gastrointestinal issues.

## STRUCTURAL VIEW OF MALS



**NORMAL**

**MALS**

## TESTING FOR MEDIAN ARCUATE LIGAMENT SYNDROME (MALS):

MALS is still considered a diagnosis of exclusion. This means that patients will go through a gauntlet of testing before they may find what is wrong with them.

### PRIMARY TESTING FOR MALS:

- Duplex or Doppler Mesenteric Ultrasound
  - Not sure on the right Protocols? We have a file with the recommended protocols to diagnosis Ultrasound Protocols for MALS on our website.
- CT Scan - With or Without Contrast
- CTA - With Breathing Protocols
- Angiogram

### TREATMENT OPTIONS FOR MALS:

- No Treatment
  - Some people choose not to have any treatment done. Some find managing their symptoms is better than having a surgery done. There are also those who aren't able to have surgery because insurance won't cover the procedure.
- Short Term Treatment
  - Physical Therapy has been shown to help some MALS patients with their symptoms. This isn't a permanent fix though. Nerve Blocks can help MALS patients with their pain symptoms. Some people choose to do a pain block regimen instead of surgery.

**Physical Therapy** • **Celiac Plexus Block** • **Splanchnic Nerve Block**

- Long Term Treatment
  - Surgery right now is the only long-term treatment method for MALS. There are 3 different types you can have, this purely depends on what type the doctor prefers.

**Laparotomy (Open)** • **Laparoscopic** • **Robotic**

**It's best to have a conversation with your doctor about your treatment options. Monitoring for potential vascular complications (blood clots, ischemia, dissection, and an aneurysm.) is an important part of your MALS care.**

FOR MORE INFORMATION ON MALS

FIND US HERE: