

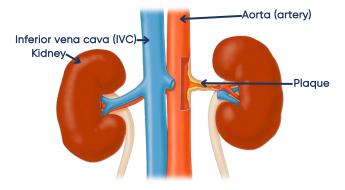
## Renal & Mesenteric Artery Insufficiency

## What is Renal & Mesenteric Artery Insufficiency?

These conditions affect blood supply to the kidneys and intestines

## **Renal Artery Insufficiency**

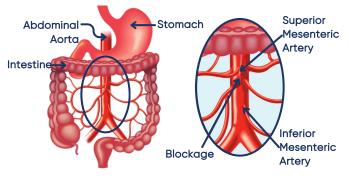
Renal artery insufficiency, also known as 'renal artery stenosis', is a condition where the arteries leading to the kidneys become narrowed or blocked. These arteries supply the kidneys with oxygen-rich blood, and when they are restricted, it can reduce your kidney function.



**Renal Artery Stenosis** 

### Mesenteric Artery Insufficiency

Mesenteric artery insufficiency, or 'mesenteric ischemia', is a condition in which the arteries that supply blood to the intestines become narrowed or blocked. These arteries provide vital blood flow to the intestines, and when this flow is reduced, it can lead to significant digestive issues.



Mesenteric Ischemia

**6**02 <u>9066 6547</u>

This leaflet should not replace your discussion with Dr Theivendran. It is solely intended to assist you in understanding renal & mesenteric artery insufficiency.





Renal Arteries (CT Scan)

Mesenteric Arteries (CT Scan)

## Causes & Risk Factors

In renal artery disease, reduced blood flow to the kidneys causes progressive kidney failure or difficult-to-control high blood pressure. In mesenteric artery disease, reduced blood flow to the intestines can cause weight loss and severe pain with eating. Risk factors include:



**Blood Clots:** These can form within the renal or mesenteric arteries, leading to blockages.

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**Fibromuscular Dysplasia:** This is where the walls of the arteries thicken, narrowing the passage for blood



Atherosclerosis: Build up of plaque on inner walls of arteries



**Trauma:** A physical injury to a renal or mesenteric artery can cause reduced blood flow.



# **Renal & Mesenteric Artery Insufficiency**

SYMPTOMS	Renal Artery Insufficiency	Mesenteric Artery Insufficiency
Location of Pain	Usually painless	Abdominal pain (often severe and crampy)
Digestive Symptoms	Usually absent or minimal	Significant digestive issues, weight loss
Blood Pressure	Difficult to manage hypertension (high blood pressure)	May or may not have changes in blood pressure
Intestinal Symptoms	Typically none	Bowel issues, potentially life-threatening intestinal damage if untreated
Presentation	Gradual onset	May be acute or chronic

## **Mesenteric Artery** Insufficiency: Acute vs Chronic

#### ACUTE

If acute mesenteric artery insufficiency is left untreated, it can have serious consequences. Symptoms include:

- Vomiting
- Diarrhea
- Abdominal Tenderness
- Severe Abdominal Pain

Acute mesenteric ischemia tends to affect men & women equally.

#### CHRONIC

Chronic mesenteric artery insufficiency usually comes on more gradually. Symptoms include:

- Vomiting
- Nausea
- Diarrhea
- Constipation
- Weight Loss
- Abdominal Pain or Discomfort After Eating

Chronic mesenteric ischemia is 3x more common in women.

## **Screening & Diagnosis**

Accurate diagnosis of these conditions is crucial for determining the appropriate treatment. Several methods can be used for diagnosis:



#### ULTRASOUND

This non-invasive test uses high-frequency sound waves (ultrasound) to examine blood flow and identify any stenosis (narrowing) or blockages in the arteries leading to the kidneys and intestines.



#### **CT ANGIOGRAPHY**

A CT scan with contrast dye is used to create detailed images of the arteries, which can reveal any blockages or constrictions.



#### **BLOOD TESTS**

Blood tests may be performed to assess kidney function or look for signs of inflammation or infection.

#### **ARTERIOGRAPHY**

A contrast dye can be injected directly into the arteries to provide a clear view of any blockages



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75%

<sup>50/50</sup> 



## Renal & Mesenteric Artery Insufficiency

## **Potential Complications**

The potential complications of Renal Artery Insufficiency and Mesenteric Artery Insufficiency include:



Acute Mesenteric Artery Insufficiency can cause life-threatening necrosis (death) of the intestines.



Chronic Mesenteric Artery Insufficiency can lead to severe abdominal pain, weight loss, and digestive issues, which, if left untreated, can also result in lifethreatening intestinal damage.



**Renal Artery Insufficiency** may cause high blood pressure and kidney problems, possibly leading to kidney failure



If you have severe, sudden belly pain that persists, please present to your local emergency department. If you develop pain after eating, please contact our rooms. (02) 9066 6547

## **Non-Surgical Treatment**

Treatment options depend on the severity of the condition, your overall health, and the specific artery affected. The main treatment approaches include:



#### MEDICATIONS

Certain medications can help control blood pressure and improve blood flow to the kidneys or intestines. For example, antihypertensive drugs can be used to manage high blood pressure.



#### LIFESTYLE CHANGES

It's essential to make healthy choices in your daily life to improve your overall vascular health. This includes quitting smoking, adopting a heart-healthy diet, and getting regular exercise.

## Surgical Treatment: Mesenteric Artery Insufficiency

In severe cases or when other treatments are ineffective, surgical procedures may be necessary:



#### ANGIOPLASTY

This minimally invasive procedure involves inserting a catheter with a deflated balloon into the blocked artery. When the balloon is inflated, it pushes the plaque against the artery walls, restoring blood flow. After angioplasty, a stent (a small tube) can be inserted to help keep the artery open.



#### THROMBECTOMY

If a blood clot is causing the blockage, a procedure called a 'thrombectomy' may be performed to remove the clot. This can be performed with minimally invasive (endovascular) techniques or with open surgery.



#### **BYPASS SURGERY**

If you have a severe artery blockage, Dr Theivendran may perform open surgery to create a bypass using a healthy blood vessel from another part of your body.



#### ENDARTERECTOMY

This open surgical procedure involves removing the plaque build-up from the artery walls.

### **Contact Details**



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