

# Acute Aortoiliac Occlusion Due to Watchman Device Embolization

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# ***Background***

## **Acute Aortoiliac Occlusion**

- Rare but life-threatening vascular emergency
- High morbidity and limb loss risk
- Most commonly due to thromboembolism

## **Left Atrial Appendage Occlusion (LAAO)**

- Increasingly used for stroke prevention in atrial fibrillation
- Device embolization reported in ~0.07% of cases
- Aortic embolization is rare

This case describes embolization of a Watchman device causing acute aortoiliac occlusion and limb ischemia.

# ***Patient Overview***

## **86-year-old male**

### **Medical History:**

- Paroxysmal atrial fibrillation (not anticoagulated due to anemia)
- CAD s/p PCI
- Prior ischemic stroke
- T2DM, HTN, HLD
- Lumbar spinal stenosis

### **Procedure:**

- Elective left atrial appendage occlusion with Watchman device

### **Initial Presentation**

- **12 hours post-discharge:**
- Bilateral lower extremity numbness
- Stiffness
- Urinary retention
- **Progression:**
- Worsening left-sided weakness and paresthesia
- No chest pain or upper extremity deficits
- Initial workup focused on neurologic etiology due to history of spinal stenosis.

# **Diagnostic Findings**



## **Initial Imaging**

- Spinal imaging: chronic degenerative changes
- No acute cord compression

## **Vascular Evaluation (after progression)**

- Bedside arterial ultrasound: diminished distal flow (left leg)
- CTA findings:
  - Embolized LAEO device in distal infrarenal aorta
  - Acute aortoiliac occlusion
  - Left femoropopliteal arterial occlusion

**Diagnosis:** Device embolization causing acute limb ischemia

# Surgical Intervention

- Open left common femoral artery exposure
- Femoral–popliteal & aortoiliac thrombectomy
- Extensive thrombus removal



Figure 2. Extensive clot removal post femoral–popliteal and aortoiliac thrombectomy.

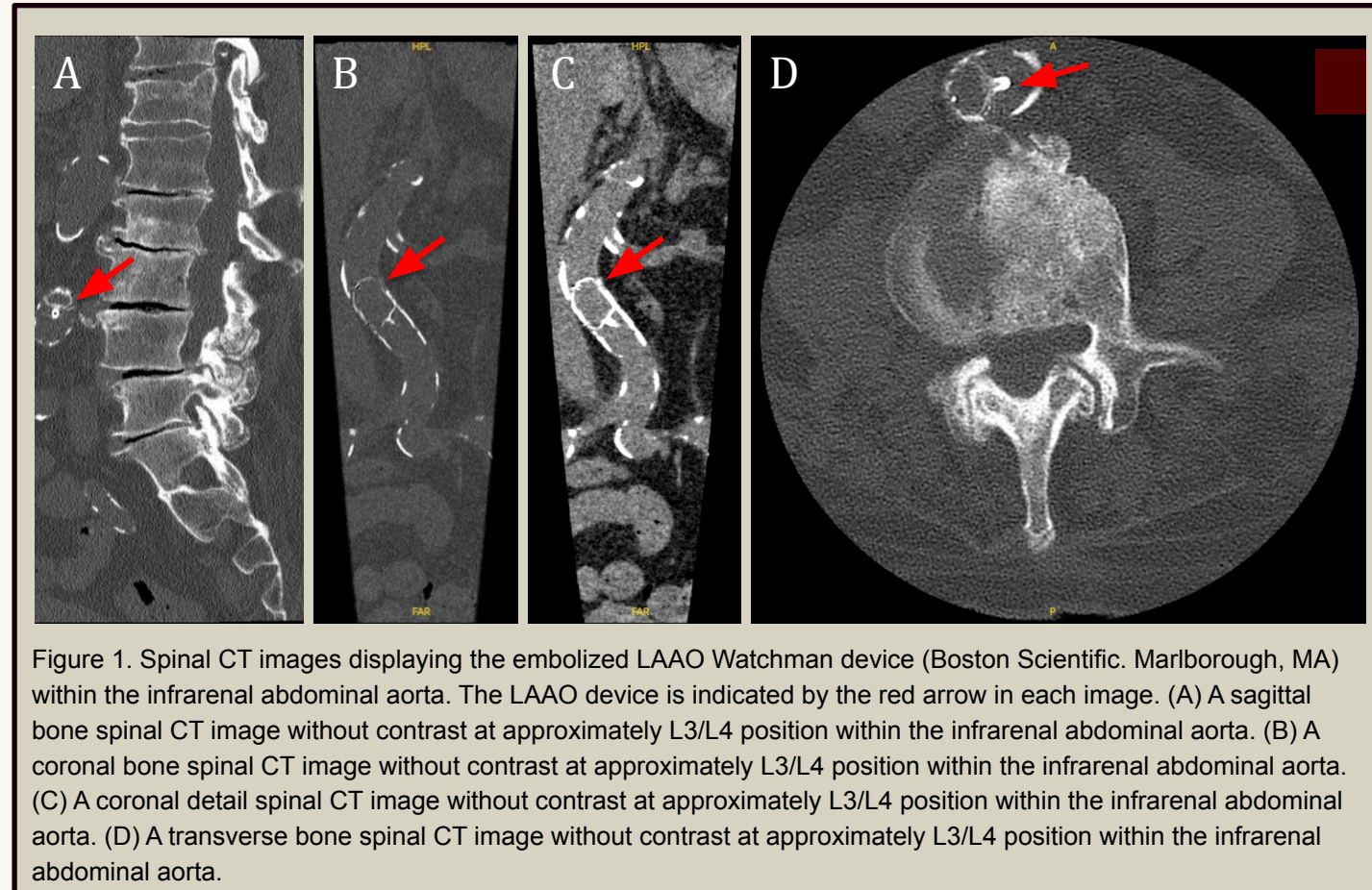


Figure 1. Spinal CT images displaying the embolized LAAO Watchman device (Boston Scientific, Marlborough, MA) within the infrarenal abdominal aorta. The LAAO device is indicated by the red arrow in each image. (A) A sagittal bone spinal CT image without contrast at approximately L3/L4 position within the infrarenal abdominal aorta. (B) A coronal bone spinal CT image without contrast at approximately L3/L4 position within the infrarenal abdominal aorta. (C) A coronal detail spinal CT image without contrast at approximately L3/L4 position within the infrarenal abdominal aorta. (D) A transverse bone spinal CT image without contrast at approximately L3/L4 position within the infrarenal abdominal aorta.

# ***Definitive Management***

Deployment of 3 infrarenal abdominal aortic GORE cuffs to:

- Exclude device
- Seal perforation
- Restore flow

Result: Macrovascular perfusion restored



Figure 3. CT angiography indicating restoration of blood flow after three infrarenal abdominal aortic GORE cuffs (W. L. Gore & Associates, Newark, DE) were deployed to pin the LAAO device against the aortic wall near the bifurcation. The LAAO device is indicated by the red arrow.



# ***Postoperative Course & Outcome***



## **Complications:**

- Persistent complete motor and sensory loss (distal left leg)
- Rhabdomyolysis
- Acute kidney injury
- Retroperitoneal hemorrhage

Renal function recovered.

## **However:**

- Irreversible ischemic neural injury
- High risk for future below-knee amputation
- Amputation deferred; rehabilitation pursued

# ***Discussion & Clinical Lessons***



## **Key Clinical Points**

- Device embolization must be considered in post-LAAO patients with acute limb symptoms.
- Neurologic presentations may delay vascular diagnosis.
- Retrieval may be limited by device anchor design.
- Hybrid open + endovascular management can restore flow.
- Limb outcome is determined by ischemia duration.

## **Take-Home Message**

Early vascular imaging is critical in post-procedural patients with evolving lower extremity deficits.

**Awareness of this rare complication is essential as LAAO device use expands.**

# References



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***THANK YOU***

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