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Case Report

# An Unusual Presentation of Fibromuscular Dysplasia

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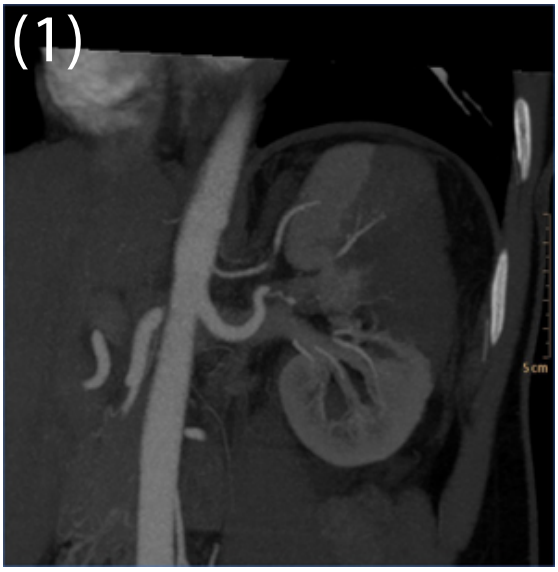


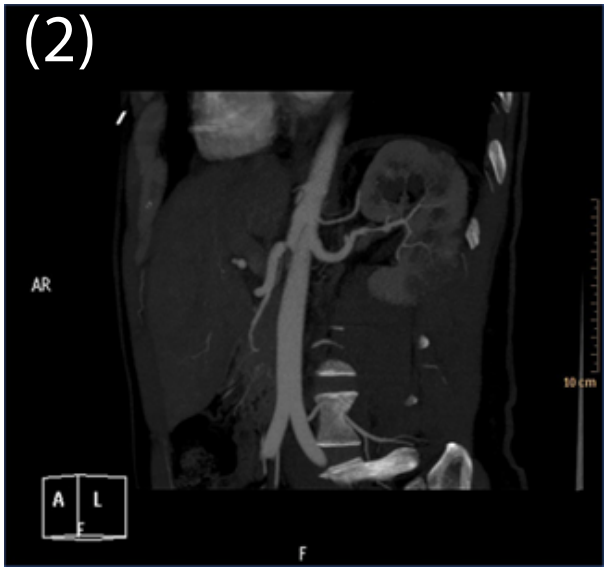


**Figure 1:** Computed tomography angiography revealed beading consistent with FMD at the distal main renal artery at the junction of the bifurcating branches.
**Figure 2:** Computed tomography angiography revealed tapered narrowing and occlusion in the more proximal artery.

**Keywords:** Fibromuscular dysplasia

## Case Report

A 47-year-old man developed sudden, severe left flank pain while driving, and went to a local emergency room. Initial work-up included serum creatinine 1.06 mg/dl, and urinalysis negative for blood, protein, and white blood cells. Renal ultrasound was obtained and which showed left renal infarction. Computed tomography angiography revealed beading consistent with FMD at the distal main renal artery at the junction of the bifurcating branches (Figure 1) and tapered narrowing and occlusion in the more proximal artery (Figure 2) most likely caused by spontaneous dissection with intramural hematoma, with resulting substantial upper pole infarct.

**Diagnosis:** Left renal infarction in the setting of fibromuscular dysplasia.

## Discussion

FMD is a non-inflammatory, non-atherosclerotic disorder that leads to arterial stenosis, occlusion, aneurysm, and dissection. Fibromuscular dysplasia (FMD) typically presents in middle aged women, often with hypertension [1]. Depending on which arteries are involved, patients may present with transient ischemic attack, headache, pulsatile tinnitus, flank pain, or stroke [2]. Computed tomography angiography, magnetic resonance angiography, duplex ultrasound and catheter based digital subtraction angiography can be ordered to confirm the diagnosis. Differential diagnosis includes atherosclerosis, polyarteritis nodosa, ehlers-danlos syndrome, marfan's syndrome, and primary and secondary hypertension. Treatment strategies include blood pressure control, angioplasty and surgery.

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## Conclusion

This is an atypical case of FMD in a male who presented with renal infarction. The patient had no prior history of renal disease, ehlers-Danlos syndrome, or marfan's syndrome. The patient has done well with no anticoagulation or invasive intervention and return of renal function to his prior baseline.

### References

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