

## 쇼크로 나타나는 신동맥 가성동맥류의 자발성 파열

명지병원 내과

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### Spontaneous Rupture of a Renal Artery Pseudoaneurysm Presenting as Shock

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**Introduction:** Renal artery pseudoaneurysm is a rare vascular lesion that arises when an arterial injury within the kidney leads to contained hemorrhage. They are being found with increasing frequency as a result of unrelated abdominal imaging or on workup for hypertension. While rarely symptomatic, they can be a cause of life-threatening hemorrhage and shock.

**Case:** A 32-year-old woman who was recommended for evaluation of high blood pressure for the previous year was admitted with a sudden onset of severe left flank pain. She was not pregnant at admission. Further questioning revealed no specific past medical history including trauma, renal surgery, percutaneous procedures, as well as inflammatory and neoplastic processes within the kidney. On examination, the patient was in hypovolemic shock (systolic blood pressure 80 mmHg). The abdomen was diffusely tender, guarded, and distended, suggestive of an acute surgical condition. Pre-angiography CT scan confirmed the large retroperitoneal hematoma, which extended through a gap in the anterior renal fascia from a left perirenal hematoma. Left renal angiography showed a pseudoaneurysm on a branch of the left renal artery. Active bleeding was detected at the time of the angiogram. Embolization was performed using meal coils. The patient had no further episodes of bleeding and her recovery was initially uneventful.

**Discussion:** Renal artery aneurysms (RAA) are localized dilations of the renal artery and/or branches. The risk of rupture is thought to vary inversely with size, and most investigators agree that an aneurysm exceeding 2 cm is more likely to undergo rupture. When patients present with symptoms, they are usually flank pain and hematuria that can range from mild microscopic hematuria to gross hemorrhage leading to hemodynamic instability. Although angiography is the gold standard, perhaps the best noninvasive test to evaluate location, size, structure, and relation to nearby organs is CT/MR angiography. Indications for treatment include hemorrhage, uncontrolled hypertension, pain, progressive enlargement, presence of an arteriovenous fistula, size >2 to 2.5 cm, or size >1 cm in a female of child-bearing age. Currently, endovascular surgery is the intervention of choice in elective or emergent circumstances. Accepted endovascular treatments include embolization (i.e., gelfoam, coils, alcohol) or stenting across the aneurysm.

**Key Words:** 동맥류, 신성, 자발성 파열

Arterial aneurysms, Renal, Spontaneous rupture

Active Bleeding



Pseudoaneurysm