

## CLINICAL PRACTICE

## Clinical Images

## Retroperitoneal Hemorrhage from Kidney Angiomyolipoma

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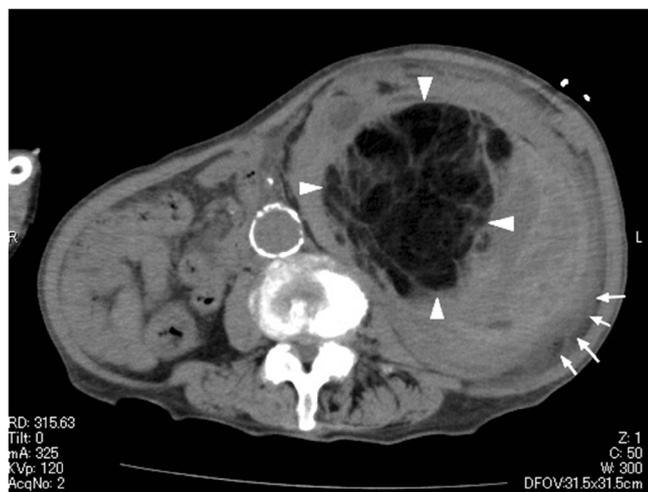
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**KEY WORDS:** angiomyolipoma; retroperitoneal hemorrhage.

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**Figure 1.** CT scan of the abdomen showing retroperitoneal hemorrhage (short arrows) and areas of fatty tissue (arrow heads).

An 86-year-old woman with end-stage renal disease (etiology unknown) presented with left flank pain for ten hours. She was hypotensive and had a firm, exquisitely tender left flank mass. Computed tomography (CT) scan of the abdomen revealed a 20 cm left renal mass with extensive fatty tissue and associated retroperitoneal hemorrhage (Fig. 1). The patient died from hemorrhagic shock. Based on the large perirenal fatty masses and the presence of a vessel extending into the renal parenchyma (Fig. 2), we concluded this was a kidney angiomyolipoma.<sup>1</sup>

Kidney angiomyolipomas are benign renal neoplasms, usually detected incidentally on imaging. Approximately 80 % occur spontaneously as in this case, while 20 % occur in association with tuberous sclerosis complex.<sup>2</sup> As the lesions



**Figure 2.** CT scan of the abdomen showing the vessel extending to the renal parenchyma (arrow).

increase in size, the vascular supply becomes aneurysmal and hemorrhage risk increases. In one study, the risk of hemorrhage in lesions larger than eight cm was 25–50 %.<sup>3</sup>

Management is based on the size of the lesion and the presence of symptoms, with a shift toward less invasive treatments. Arterial embolization is used to reduce the size of angiomyolipomas,<sup>4</sup> and regrowth does not occur after successful embolization. Some authors suggest arterial embolization if the tumor is symptomatic or greater than four cm.<sup>5</sup>

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