## The Cause of Abdominal Pain after Dialysis

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A 56-year-old woman presented to the emergency department with a sudden onset of nausea, vomiting, abdominal pain, and distension. Her symptoms started after dialysis and progressively worsened. Upon admission, a physical examination revealed a heart rate 96 beats/min, a blood pressure of 70/40 mmHg, left quadrant tenderness, rebound, and rigidity. Her hemoglobin level was 4.4 gr/dL and her platelet count was normal. Activated prothrombin time was high and the INR was 7.69. A computed tomographic scan without contrast was performed (Figure 1). (see page 39 for diagnosis).

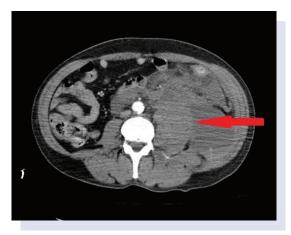


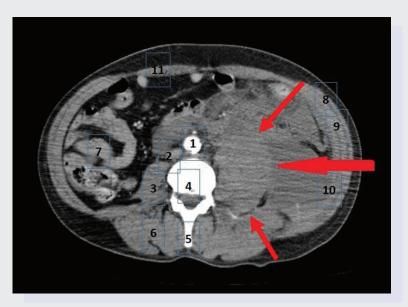
Figure 1. Computed tomographic scan of the patient.



[see page 2]

## **DIAGNOSIS: Psoas Hematoma**

Computed tomographic scan without contrast revealed a psoas muscle hematoma at the widest point of 9 cm (Figure 1). Spontaneous hematomas of the iliac psoas muscle are rare lesions seen in patients receiving anticoagulant agent. Several reports have suggested that most traumatic psoas hematomas are caused by blunt trauma or rupture. [1,2] However, a considerable amount of patients suffered a spontaneous hemorrhage even though they were on anti-coagulant therapy, specifically heparin. [3,4] Hemodialysis catheter patency is regularly maintained by a high-concentration heparin filling, according to manufacturer's recommendation. Surprisingly, there are only a few reports of serious bleeding complications.



**Figure 1.** Psoas hematoma (red arrow) 1. Aorta; 2. Inferior vena cava; 3. Psoas muscle; 4. Vertebra; 5. Vertebra (spinous process); 6. Erector spinae muscle; 7. Colon; 8. External oblique muscle; 9. Internal oblique muscle; 10. Tranversus abdominis muscle; 11. Rectus abdominis muscle.

## References

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