

# KSN 2016 Abstract Submission

*CKD & associated complications*

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## **Nine Cases of Spontaneous Lumbar Artery Rupture: single center experience**

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**Background:** Lumbar artery rupture is a rare vascular complication and we experienced nine cases retroperitoneal hematoma caused by spontaneous lumbar artery rupture. This study reviewed the clinical characteristics and outcomes of patients with spontaneous lumbar artery rupture in our hospital and explored the possible risk factors related with that.

**Methods:** A retrospective chart review was conducted to determine patient demographics, laboratory findings, presenting symptoms, anticoagulant/antiplatelet agent use and patient outcome during last 16 years (2000~2016).

**Results:** Male to female ratio was 5:4 and the mean age was  $64.8 \pm 14.3$  years old. Overall, eight of nine patients were receiving an anticoagulant/antiplatelet medication at the time of spontaneous lumbar artery rupture. Four patients were on anticoagulant therapy, two patients were on antiplatelet therapy and two patients were on both anticoagulant and antiplatelet therapy. Three patients (33.3%) were on maintenance hemodialysis and one patient had acute kidney injury. One of chronic renal failure patient was not taking anticoagulant/antiplatelet agent, but he was being treated with hemodialysis using heparin when the retroperitoneal bleeding occurred. The most presenting symptom was hypotension. Laboratory values on initial presentation included; mean hemoglobin  $6.9 \pm 1.75$  g/dL, serum creatinine  $2.11 \pm 1.73$  mg/dL, blood urea nitrogen  $30.14 \pm 17.87$  mg/dL, PT INR  $2.5 \pm 2.8$ , aPTT  $72.7 \pm 48.5$  seconds. The retroperitoneal hematoma was controlled successfully by trans-catheter arterial embolization in all patients, but four patients developed multiple organ failure with hypovolemia, and died (mean age  $71.5 \pm 11.4$  years).

**Conclusion:** We suggest that spontaneous lumbar artery rupture could be developed especially in patient with maintenance hemodialysis or oral anticoagulant/antiplatelet agent. So, clinician should suspect lumbar artery rupture in patient with unstable vital sign and rapid onset of anemia because early diagnosis and appropriate intervention could be necessary for life saving.

**Keywords:** anticoagulant, lumbar artery, spontaneous retroperitoneal hematoma