

Retroperitoneal Hematoma caused by External Iliac Artery Rupture after Coil Embolization

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Introduction

In the treatment of cerebral aneurysms, retroperitoneal hematoma complication is very rare in coil embolization method using transfemoral approach.

We experienced one case of retroperitoneal hematoma formation due to rupture of external iliac artery immediately after coil embolization on unruptured aneurysm.





Patient and method

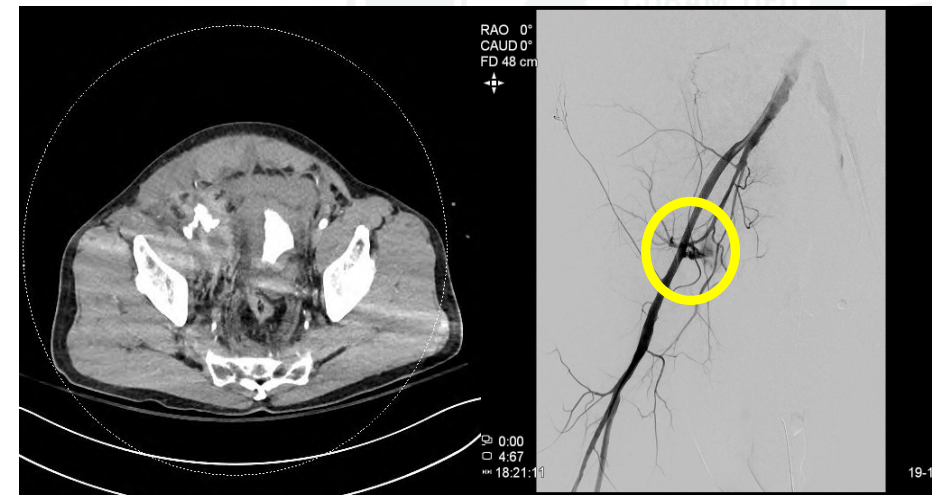
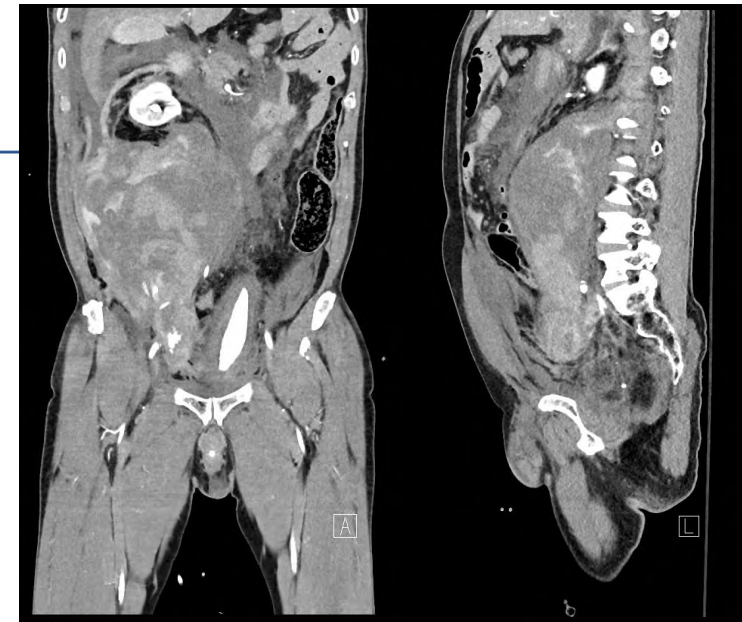
- A 65-year-old male patient visited our center complaining intermittent headache for 1 month. Through serial work up, 3.21mm * 5.17mm sized unruptured aneurysm located in Lt. middle cerebral artery was confirmed.
- Simple coil embolization was done on the lesion and near total occlusion with remnant neck was confirmed.





Patient and method

- An hour after operation, sudden abdominal distension occurred with unstable vital sign(60/40 – 160 – 20 – 36.1). Radiologic findings were retroperitoneal hemorrhage due to rupture of Rt. External iliac artery. Huge hematoma was compressing the kidney, abdominal aorta and adjacent structures.
- The patient showed signs of hypovolemic shock, resulting in acute kidney injury with pulmonary edema.

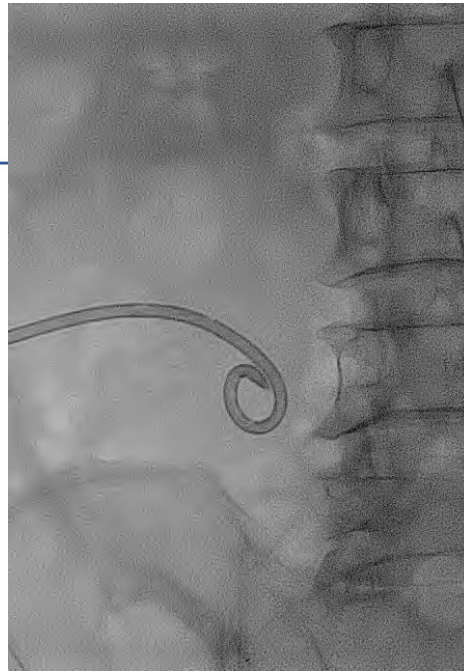
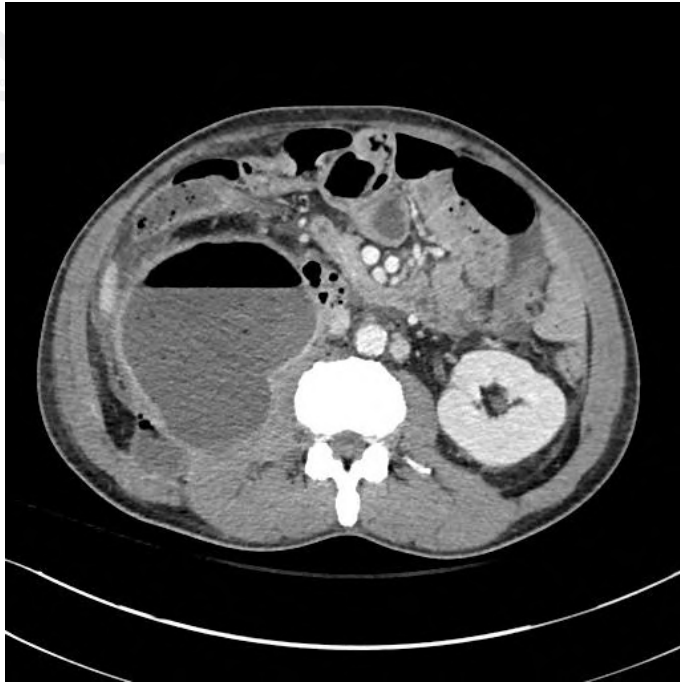




Result

- Emergent graft stenting was done and patient was transferred to ICU and underwent intensive treatment for a month.
- After one month of critical care, Percutaneous drainage catheter was inserted in the hematoma, and hard hematoma remained.
- PCD was removed and the patient was discharged without symptoms or abnormal laboratory finding.





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- 2 months after discharge, the patient was readmitted via emergency room with fever. Radiologic finding implied abscess formation and fluid collection on the previous hematoma space. PCD was reinserted administering antibiotics.
- After 2 weeks, follow-up CT showed complete resolution of preexisting retroperitoneal hematoma





Conclusion

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- After interventional procedures for brain lesion, it is necessary to have close monitoring of general lab results, routine physical examinations and vital sign such as blood pressure, rather than focusing only on neurological symptoms.
- Considering the procedural related risk factors such as previous catheterization, high dose and longer duration of anticoagulation, larger arterial sheath, prolonged procedure duration, it is important to generally assess patients.

