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Spinal Cord Ischemia Following Endovascular Repair of Infrarenal Abdominal Aortic Aneurysm: A Rare Complication

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SPINAL CORD ISCHEMIA FOLLOWING ENDOVASCULAR REPAIR OF INFRARENAL ABDOMINAL AORTIC ANEURYSM: A RARE COMPLICATION

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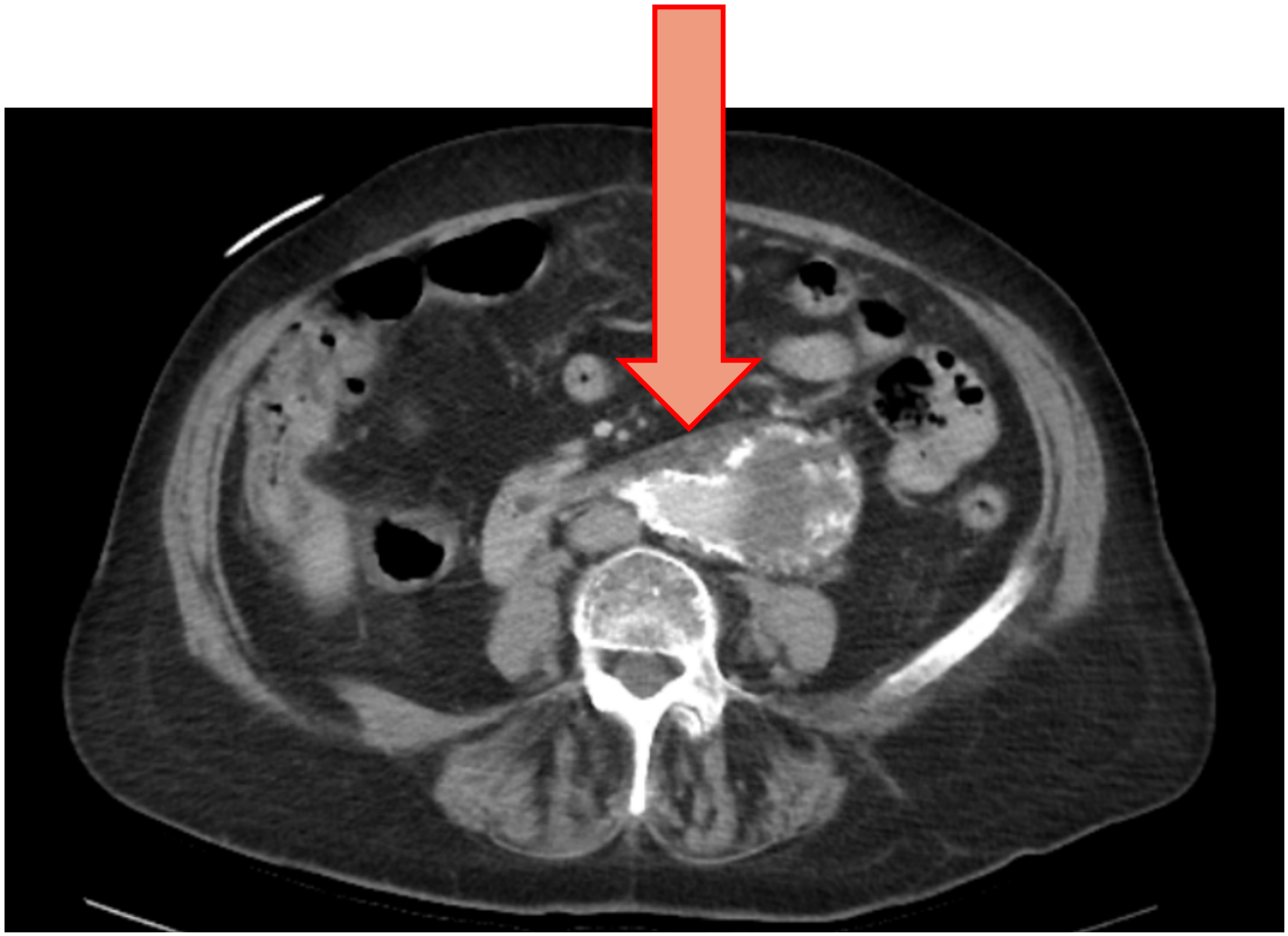
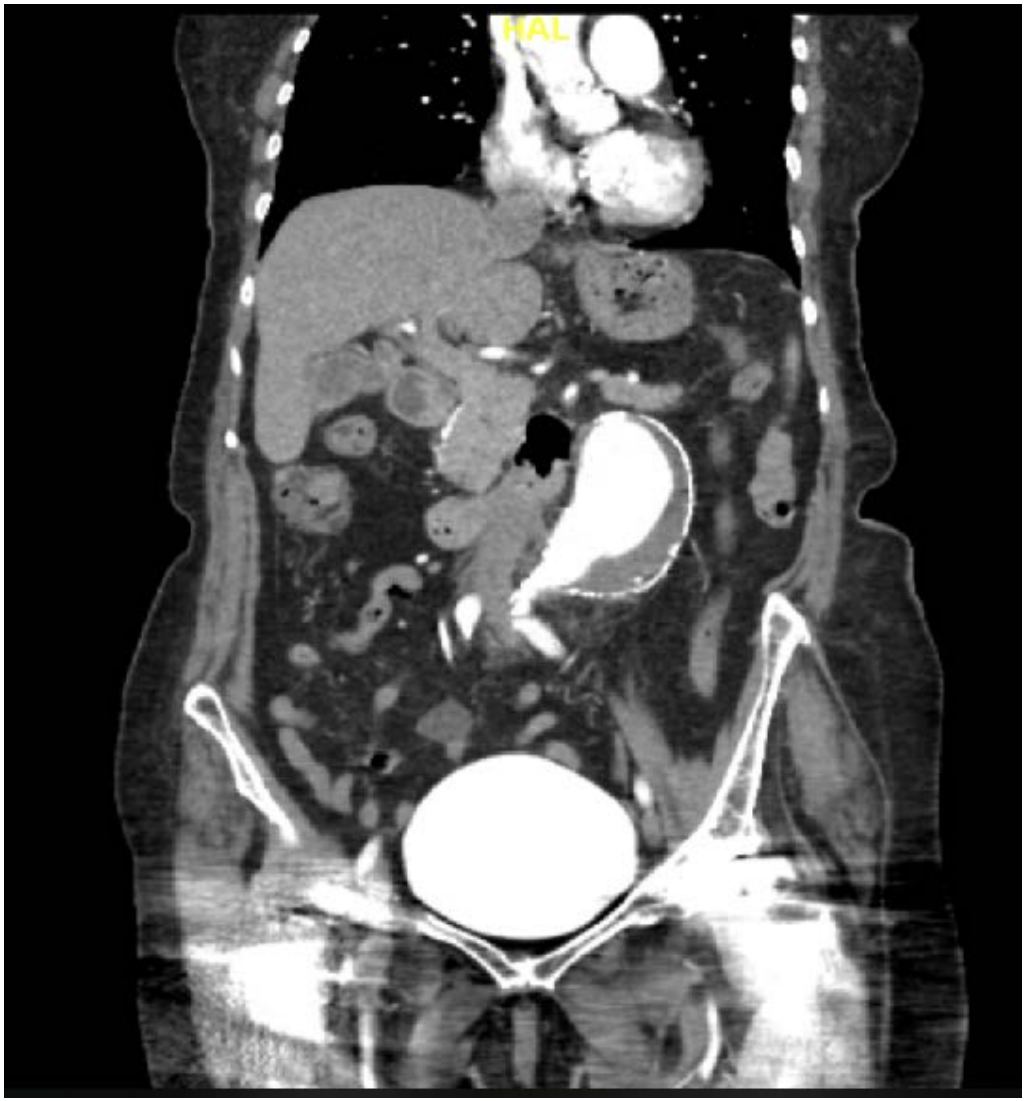
Introduction

- Paralysis secondary to spinal cord ischemia following Endovascular repair of infrarenal abdominal aortic aneurysm is extremely rare complication, the reported incidence in the literature is 0.21%.

Case report

- 85-year old female patient who presented to the emergency department with abdominal pain radiating to the back.
- Abdominal examination showed mild epigastric tenderness.
- Laboratory work up was within the normal limits
- Computed Tomography Angiography of the abdomen and pelvis which showed impending rupture of 5.8 cm abdominal aortic aneurysm.




HAL

- Infrarenal endovascular bifurcated graft with main body graft, 28 x 14 x 16 mm, with right iliac limb extension graft measuring 14 x 14 mm.

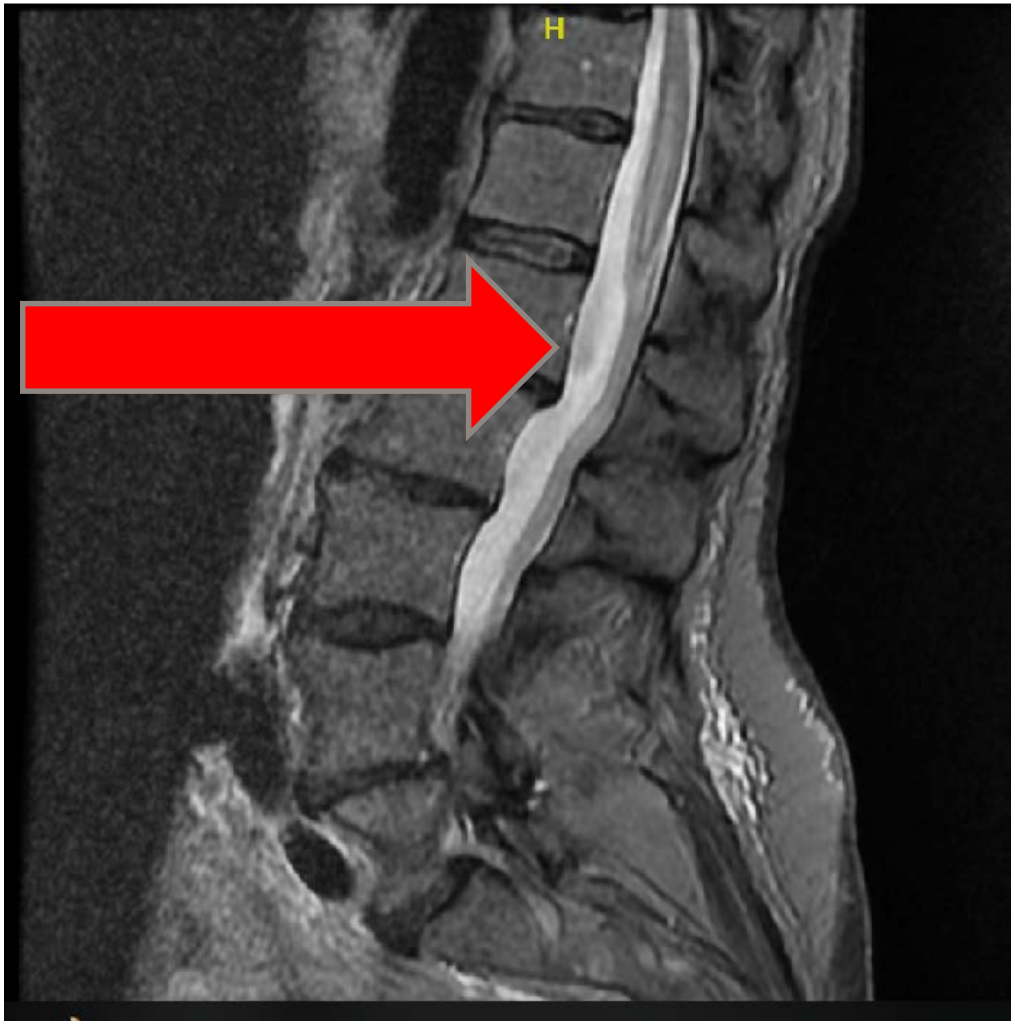
- Angioplasty of proximal, gate, at the bifurcation and distally in the iliac in a standard fashion.

- A completion angiogram revealed excellent seal with no leak.

Post Op course POD 1

- ICU admission.
- POD 1 : lower limb weakness which she did not have prior to the surgery.
- Her neurological exam revealed bilateral lower limb paralysis with intact sensation.
- Her femoral pulses were present.

Infarction of the distal spinal cord



- Physical and neurology evaluation
- Discharge POD 5 to rehabilitation facility

Etiology

- Not fully understood.

- Multiple factors has been described :
  - Atheromatous embolization
  - Interruption of the great radicular artery (artery of Adamkiewicz)
  - Interruption of collateral circulation from the internal iliac and lumbar arteries.

Treatment

- Cerebrospinal fluid drainage
- Steroids
- Hypothermia
- Spinal cord perfusion pressure augmentation.