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

Abdelrahman Attili MD
Alberto Gonzalez

Follow this and additional works at: https://scholarlycommons.hcahealthcare.com/general-surgery

Part of the Pathological Conditions, Signs and Symptoms Commons, and the Surgery Commons
SPINAL CORD ISCHEMIA FOLLOWING ENDOVASCULAR REPAIR OF INFRArenal ABDOMINAL AORTIC ANEURYSM: A RARE COMPLICATION

• Abdelrahman Attili, MD
• General surgery resident, PGY-5
• UCF College of Medicine/ HCA, Ocala Regional Medical Center
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.
• 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.