Type IV Thoracoabdominal Aneurysm in Renal Allograft Recipient
Endovascular Management with Unforeseen Outcome

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Immunosuppression Therapy & AAA

- Rapid Progression
- New Ones

Circulation

Immunosuppression and the Abdominal Aortic Aneurysm: Doctor Jekyll or Mister Hyde?
Jan H.N. Lindeman, Ton J. Rabelink and J. Hajo van Bockel
Our Case

- 42 years, Male
- 2002 Renal Tx
- Rt. Iliac Fossa Internal iliac artery
- On triple immune therapy
- Feb 2016 Acute Upper Abdominal Pain
- Ultrasound epigastric pulsating mass
Preoperative Work Up

• Laboratory
  – Moderate microcytic hypochromic anemia
  – Mild leukocytosis
  – High ESR and CRP
  – Normal S. Urea and S. Creatinine
  – eGFR above 70, no proteinuria
  – Normal S. Lipase and S. Amylase
Options and Strategic Planning

- Open & Hybrid Repair
  - Complex - Proximity of SMA to aneurysm
  - Renal Protection - Patient’s Wishes
Strategic Planning

Endovascular

Fenestrated

- Ideal
- Custom made
- Time constrain

Parallel Endograft

- Versatile
- Modular Nature
- Over the shelf
- Near absence of proximal thrombus
PROCEDURE
Procedure & TOOLS

• Supine under GA
• Bilateral Axillary Arteries Cut Down
• Left Femoral Cut Down for DEVICE
• Right Femoral Percutaneous ANGIOGRAPHY
• Right Axillary 9FR SHEATH
• SMA
Procedure & TOOLS

- Left Axillary
  - 6Fr 60 CM Destination®
  - CELIAC TRUNK
- Straight Graft
  - Relay Plus® 36x145 Bolton© over Amplatz Super Stiff 0.35 Guide Wire Boston Scientific
- Deployment of Covered Stents
  - Fluency® Bard Medical Self Expandable 7x 90 mm for SMA
  - Life Stream® Bard Medical Balloon Expandable 8X 57 mm for Celiac
POST PROCEDURE
No Endoleak, No Coverage of Lumbar arteries, Shrinkage
THE STORY DIDN'T END YET
Few Weeks Later

• Typical Duodenal Ulcer Pain

Upper GI Endoscopy
- 2nd part deep ulcer
- Pearly white floor

CT Enterography
- Confirming the seat of ulcer
- No extravasation

Work Up
- Leukocytosis & Aneamia
- High ESR
- High CRP
- -ve three consecutive Blood Cultures
CT Angiography
WAS IT THERE BEFORE ???
INFECTED AORTIC ENDOGRAFT
UNMASKED PREXISISTING AORTO-ENTERIC FISTULA
PREPARATION

• Hospital admission
• Shift to Non Steroidal Immunosuppression Protocol
• Aggressive Anti Ulcer Treatment
• Triple Antibiotic therapy
• Monitoring of Inflammatory Mediators
• Correction of Aneamia
URGENT EXPLORATION
WEEKEND EARLY MORNING
FRANK HEAMATEMESIS
URGENT EXPLORATION
THORACO ABDOMINAL EXPOSURE
Take Home Message

- Aortoenteric fistula could be tricky.
- A balance between the allograft ischemic potential if open repair and the nephrotoxic potential after contrast exposure associated with endovascular management.
- Surgery remains the standard of care in management of aortoenteric fistula.
WARM GREETINGS
FROM CAIRO UNIVERSITY
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