A NEW TECHNIQUE OF ENDOVASCULAR SCISSORING TO MANAGE VISCERAL MALPERFUSION IN COMPLICATED POST CHRONIC TYPE B DISSECTION, RUPTURED THORACIC AORTIC ANEURYSM

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CASE RESUME

• 65 YR OLD MALE
  • HYPERTENSIVE, HEAVY SMOKER

• CHEST PAIN
  • NOT RESPONSIVE TO MEDICATION

• ECHOCARDIOGRAPHY
  • DISSECTED ?? ANEURYSMAL THORACIC AORTA

• H/O AORTO-BI-ILIAC FOR INFRAARENAL AAA

• VITALLY STABLE YET HEMOGLOBIN DROP

• ADMITTED TO HDU
CT ANGIOGRAPHY

FINDINGS
• PARTIALLY THROMBOSED FALSE LUMEN ANEURYSM
• MAJOR ENTERY TEAR MID THORACIC AORTA
• COLLAPSED TRUE LUMEN
• 2RY ENTERY TEAR AT THE VISCERAL SEGMENT
• FALSE LUMEN ENDS PROX TO RENAL A.
• MALPERFUSION OF CEALIAC AND SMA WITH LINEAR DISSECTION OF BOTH
MANAGEMENT’S PLAN — HYBRID PROCEDURE

- PRE DEPLOYMENT PARTIAL ARCH DEBRANCHING (C-C-SCA)
  *SEPARATE SESSION*

- ZONE I PROXIMAL LANDING

- TWO DEVICE SOLUTION
  - PROXIMAL FIRST TO SEAL THE PRIMARY ENTRY TEAR
  - MODIFIED SCISSORING TECHNIQUE
  - DEPLOYMENT OF THE SECOND PIECE
  - POTENTIAL STENTING OF SMA & CELIAC ARTERIES
SHORTLY AFTER- RUPTURED ANEURYSM

• NEAR MID NIGHT CALL------- SUDDEN DECOMPANSATION
  • HYPOTENSION
  • SEVERE RESPIRATORY DISTRESS WITH INCREASED OXYGEN REQ
  • ALMOST ABSENT AIR ENTRY ON LEFT SIDE
  • NO PLACE FOR CHEST DRAIN
  • MV AND VASOPRESSORS

MASSIVE LEFT HEAMOTHORAX
RACING AGAINST TIME

- IMMEDIATE TRANSFER TO OUR HYBRID SUIT

PROCEDURE PLAN

- SUPRA-AORTIC DEBRANCHING (C-C-SCA)
- DEPLOY TAPERED PROXIMAL ENDOGRAFT (40-36)
- SCISSORING OF THE SEPTUM
- DEPLOY THE DISTAL ENDOGRAFT (38-34)
- CHECK VISCERAL FLOW
PROCEDURE

TEMPORARY BULLDOG CLAMP
TEVAR
DEPLOYMENT-
PROXIMAL
CANNULATION OF TRUE AND FALSE

IMAGING CATH RT. FEMORAL

DIAGNOSTIC CATH FALSE LUMEN

SUPER STIFF TRUE LUMEN

12 Fr SHEATH LT. FEMORAL

Zoom: 117% Angle: 0
Im: 1/1
JPEGLossless:Non-hierarchical-1stOrderPrediction
Made In Heros
TEVAR – DISTAL – HAZY FILLING OF CELIAC & SMA
STENTING OF SMA & CELIAC ARTERIES
POST OPERATIVE COURSE

• RESUMED HEAMODYNAMIC STABILITY
• GRADUAL WEANING OF VASOPRESSORS
• ADQAUTE RENAL OUTPUT
• CHEST TUBE DRAIN INSERTION
• ALLOWED GRADUAL MV WEANING OVER 4 DAYS
• NO NEUROLOGICAL DEFICIT
• INTACT LIMB PULSES
• TRANSFERRED TO REGULAR WARD IN 10 DAYS
TWO WEEKS FOLLOW UP CT
TOTAL THROMBOSIS OF FALSE LUMEN
TYPE Ib ENDOLEAK SCHEDULED FOR F/U CT
IN 12 WEEKS
SCISSORING RESULTS
TAKE HOME MESSAGE

• HIGH FLOW, WELL EQUIPED, 24/7 HOSPITAL
• TEAM WORK
• COMPLEX DISSECTION IS A MENTAL PROCESS
• PROCEDURE’S SEQUANCE COULD BE REARRANGED
• THINKING OUTSIDE THE BOX MIGHT BE LIFE SAVING
THANK YOU