TIPS & TRICKS FOR GETTING SUPRACELIAC AORTIC BALLOON CONTROL WITH EVAR FOR RAAAs

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I HAVE NO FINANCIAL CONFLICTS BUT LOTS OF BIAS
ENDOVASCULAR TOOLS IN THE MANAGEMENT OF RAAAs

CONCEPT WE HAVE HAD SINCE FIRST EVAR IN 1992
EVAR INTUITIVELY BETTER

- MINIMIZES DISSECTION
- CUTS BLOOD LOSS
- AVOIDS HYPOTHERMIA
- AVOIDS VESSEL INJURY
- AVOIDS COAGULOPATHY
- REQUIRES DIF SKILLS & EQUIP
OUR & OTHERS’ RESULTS SUGGEST THAT EVAR IMPROVES Rx OUTCOMES FOR RAAAs

VEITH, ET AL, ANN SURG 2009
HOWEVER
SOME GROUPS
HAVE HAD POOR
RESULTS WITH
EVAR FOR RAAAs
WHY DO THESE DIFFERENCES IN RESULTS & OPINIONS EXIST ABOUT EVAR FOR RAAAs
WE BELIEVE
TREATMENT STRATEGIES
ADJUNCTS & TECHNIQUES
MAKE A DIFFERENCE & IMPROVE RESULTS & OUTCOMES OF EVAR FOR RAAAs & EXPLAIN GOOD RESULTS...
THESE INCLUDE

HYPOTENSIVE HEMOSTASIS
PROPER USE OF SC AORTIC BALLOON CONTROL
AGGRESSIVE Dx & Rx OF ACS
USE OF EVAR ON ALL POSSIBLE PATIENTS – INCL HI RISK PTS
HAVING A TEAM, A PROTOCOL & COMMITMENT TO EVAR
ONE KEY STRATEGY

RESTRICT

RESUSCITATION

“HYPOTENSIVE HEMOSTASIS”

PATIENT MOVING & TALKING IS OK
HYPOTENSIVE HEMOSTASIS NOT ENOUGH IN ~25% OF RAAA PTS & C-V COLLAPSE OCCURS
NEED SC AO BALLOON TECHNIQUE IS KEY BUT SOMEWHAT COMPLEX FAVORED TECHNIQUE VIA FEMORAL ACCESS
ALTHOUGH TRANSBRACHIAL ACCESS CAN BE USED BUT NOT BEST …

1. CROSS ARCH GRIEF
2. MORE TIME
3. ARTERY DAMAGE
FEMORAL INSERTION

• EASIER
• QUICKER, BUT
• BLOWDOWN
• CUMBERSOME
• CANT LOSE CONTROL UNTIL AAA SEALED
EQUIPMENT FOR BALLOON CONTROL

- 10 – 14 Fr SHEATHS
- LARGE COMPLIANT BALLOONS
- STOCK OF ENDOGRAFT COMPONENTS, ETC
KEYS TO AO BALLOON CNTRL WITH RAAAs

- MUST BE SUPRA-CELIAC
- NOT SIMPLE
- ONLY USE IF NEEDED ~ 25%
- MINIMIZE SC OCCLUSION TIME WITH 2ND BALLOON IN EVG ASAP
- CANNOT RELEASE CONTROL UNTIL AAA RUPTURE SEALED
TECHNICAL STEPS

- LOCAL ANESTHESIA
- PERCUT PUNCTURE
- ULTRASOUND PRN
- SMALL SHEATH - WIRE
- LG SHEATH - BALLOON
  ONLY IF NEEDED
FEMORAL INSERTION WITH MODULAR EVG

• 10-14 Fr SHEATH VIA LEFT(L) FEM
• SUPRACELIAC BALLOON VIA L
• FLUORO-GUIDED INFLATION
  ***WITH SHEATH SUPPORT***
• DEPLOY BODY & IPSI LIMB VIA R
• 2nd BALLOON VIA R SIDE
• INFLATE IN BODY, REMOVE 1st BALLOON VIA SHEATH, FINISH
SUPRACELIAC BALLOON

SHEATH W BALLOON & PIGTAIL VIA L FEM

MAIN ENDOGRAFT VIA R FEM
INJECTION VIA SHEATH VIA L FEM SHOWS RENALS ETC
KEY TECHNICAL POINTS FOR THIS

• MUST NEVER LOSE BALLOON CONTROL
• SECOND BALLOON IN BEFORE 1ST OUT
• GOES IN GRAFT BODY VIA LONG LIMB
• IF LONG LIMB UNSEALED, NEED THIRD BALLOON VIA SHORT LIMB EXTENS
• GRAFT SHEATH TIPS GO BY BALLOON OVER STIFF WIRES LEFT IN TH AORTA
DOES THIS WORK?

YES

MANY REFERENCES
WHEN EVAR NOT POSSIBLE OPEN REPAIR CAN BE DONE WITH BALLOON CONTROL IF ENDOCOMPETENT
CONCLUSIONS

• ENDOVASC TREATMENT BEST FOR RAAAs
• HOW YOU DO IT MATTERS – ESP WITH AO BALLOON
• HOPEFULLY THESE TIPS & TRICKS WILL HELP
TIPS & TRICKS FOR GETTING SUPRACELIAC AORTIC BALLOON CONTROL WITH EVAR FOR RAAAs

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