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

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LINC - 2019

LEIPZIG – JAN 25, 2019

I HAVE NO
FINANCIAL CONFLICTS
BUT LOTS OF BIASES

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…

KEY STRATEGIES, ADJUNCTS & TECHNIQUES

VEITH, ET AL

ANN SURG, 250:818

NOVEMBER 2009

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

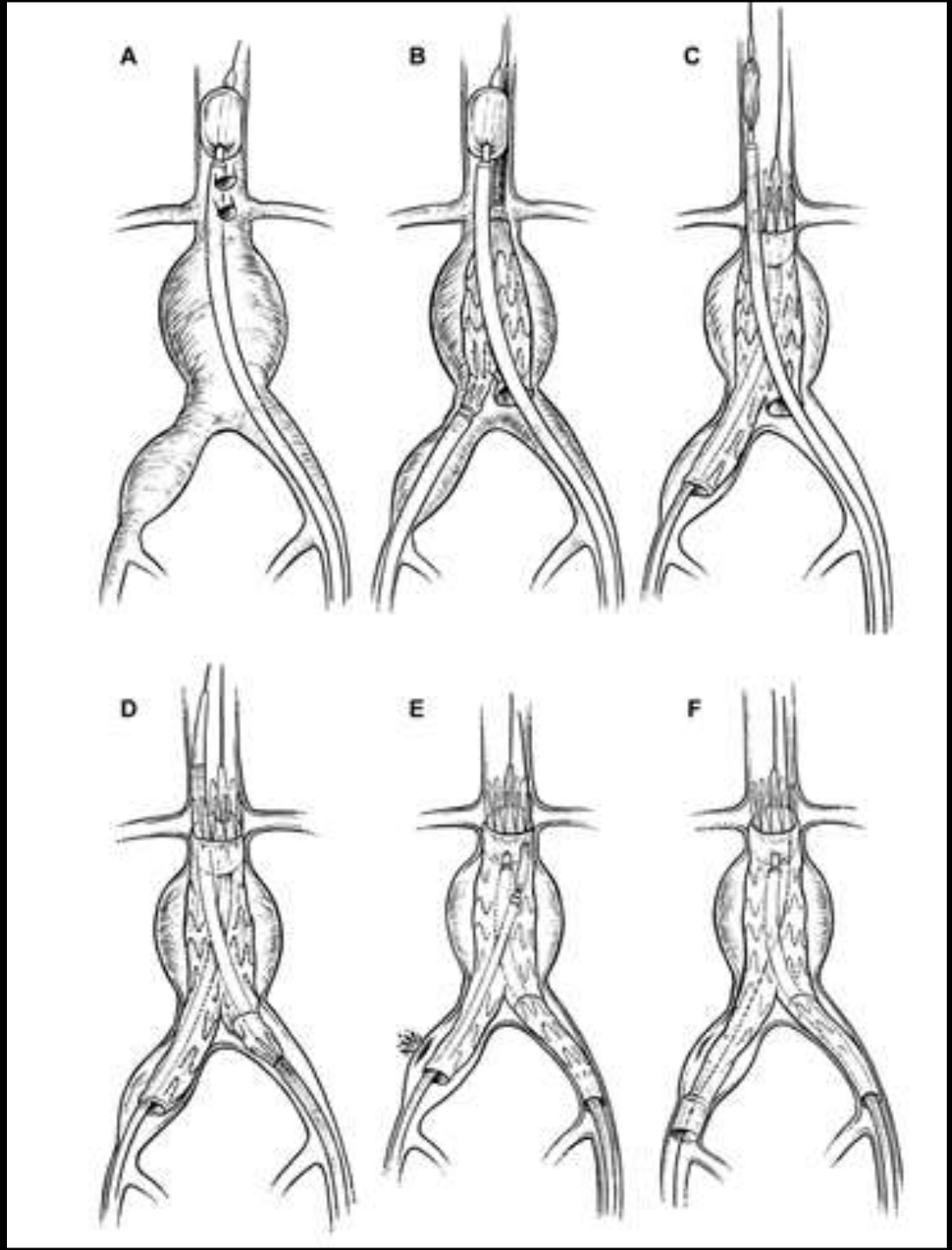
DETAILS IN

BERLAND

VEITH

CAYNE

JVS - JAN 2013, P 272



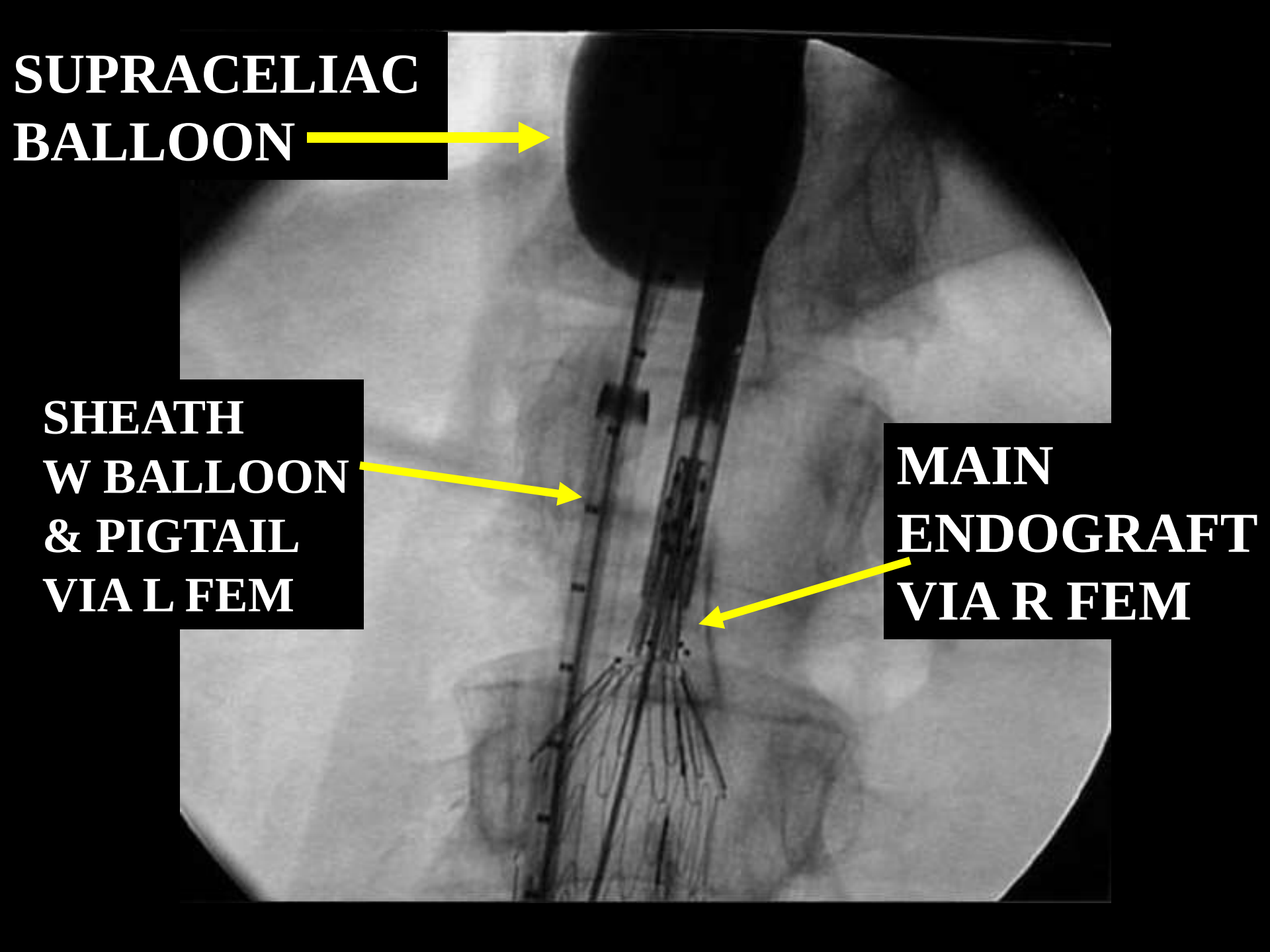
TECHNICAL STEPS

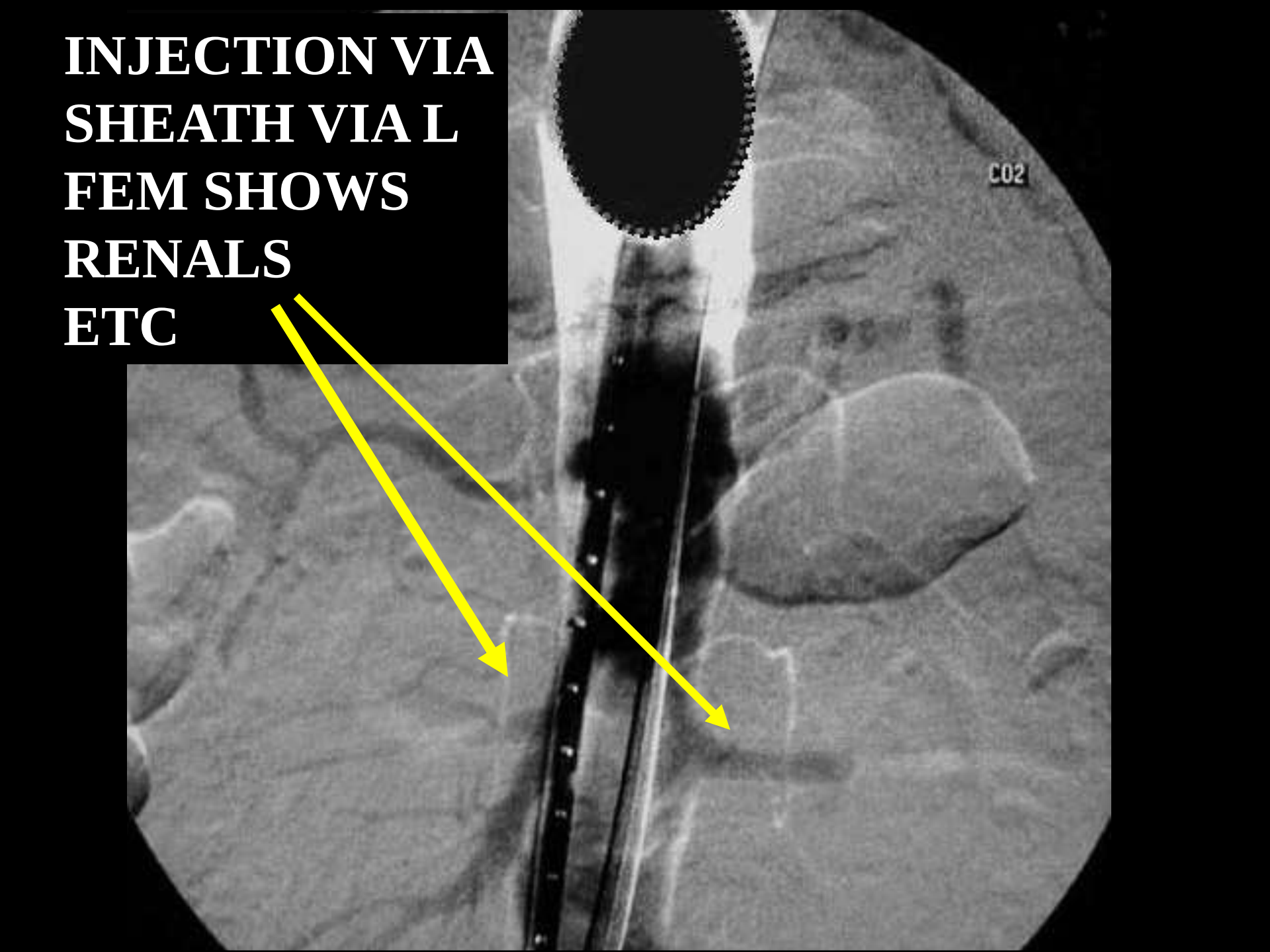
- LOCAL ANESTHESIA
- PERCUT PUNCTURE
- ULTRASOUND PRN
- SMALL SHEATH-WIRE
- LG SHEATH - BALLOON
  ONLY IF NEEDED

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
CO2

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

BERLAND
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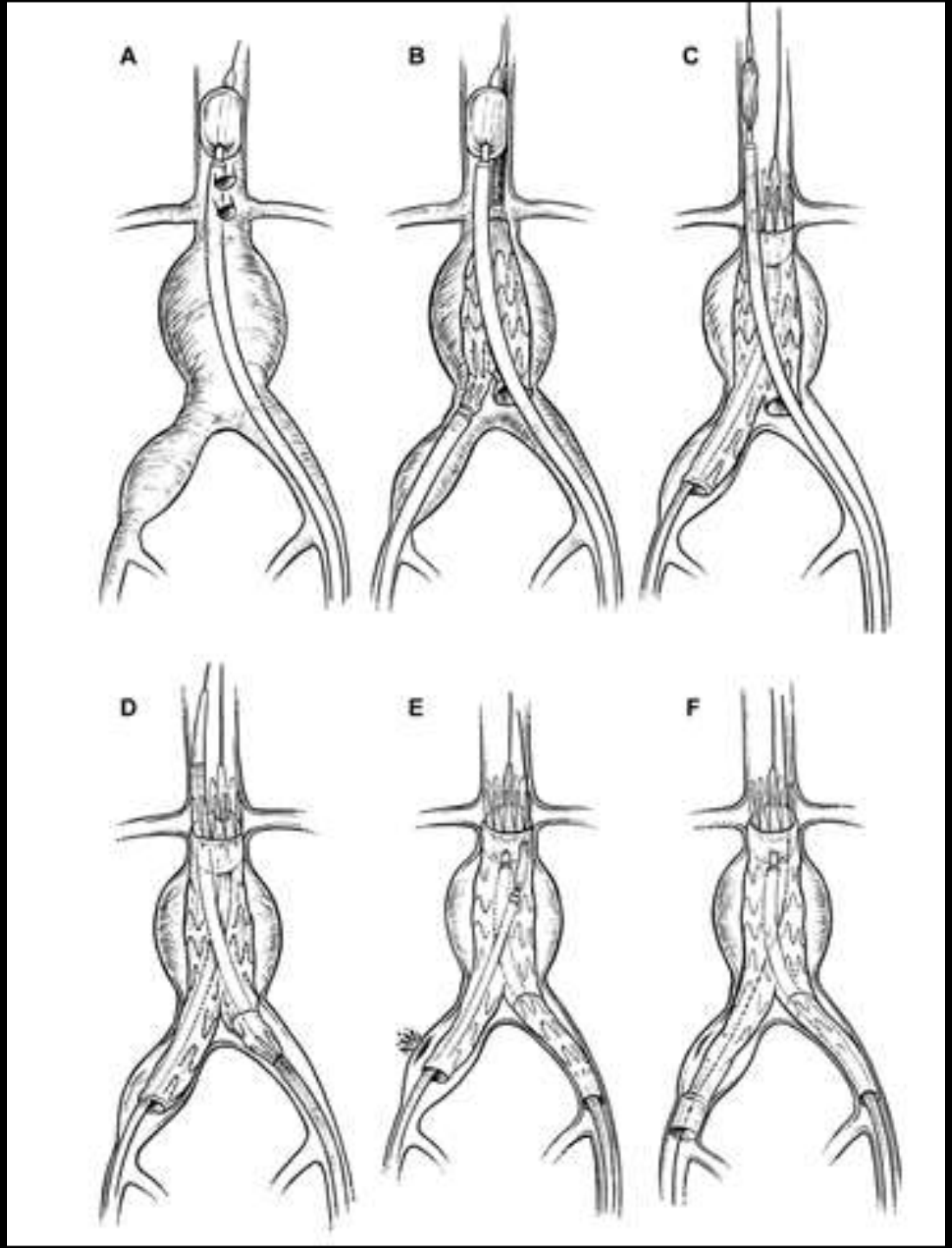

WHEN EVAR NOT POSSIBLE OPEN REPAIR CAN BE DONE WITH BALLOON CONTROL IF ENDOCOMPETENT

CONCLUSIONS

- ENDOVASC TREATMENT BEST FOR RAAAs
- HOW YOU DO IT MATTERS
  - ESP WITH AO BALLOON
- HOPEFULLY THESE TIPS & TRICKS WILL HELP


THANKS FOR YOUR
ATTENTION

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