



**LIVE** 2019  
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Education



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IVD  
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Diseases (IVD), Greece

10<sup>th</sup>  
ANNIVERSARY

<http://www.live2019.gr>

In collaboration with:  
Hellenic Society of Vascular and Endovascular Surgery  
Stony Brook University Medical Center, New York, USA  
International Symposium on Endovascular Therapeutics  
IMAC Intervention Master Aortic Course

**May 9-11 2019**

**Larissa Imperial Hotel  
Larissa, GREECE**

## CHIMNEY EVAR: HOW WE DO IT

# The procedure step by step

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*University of Thessaly, Larissa, Greece*

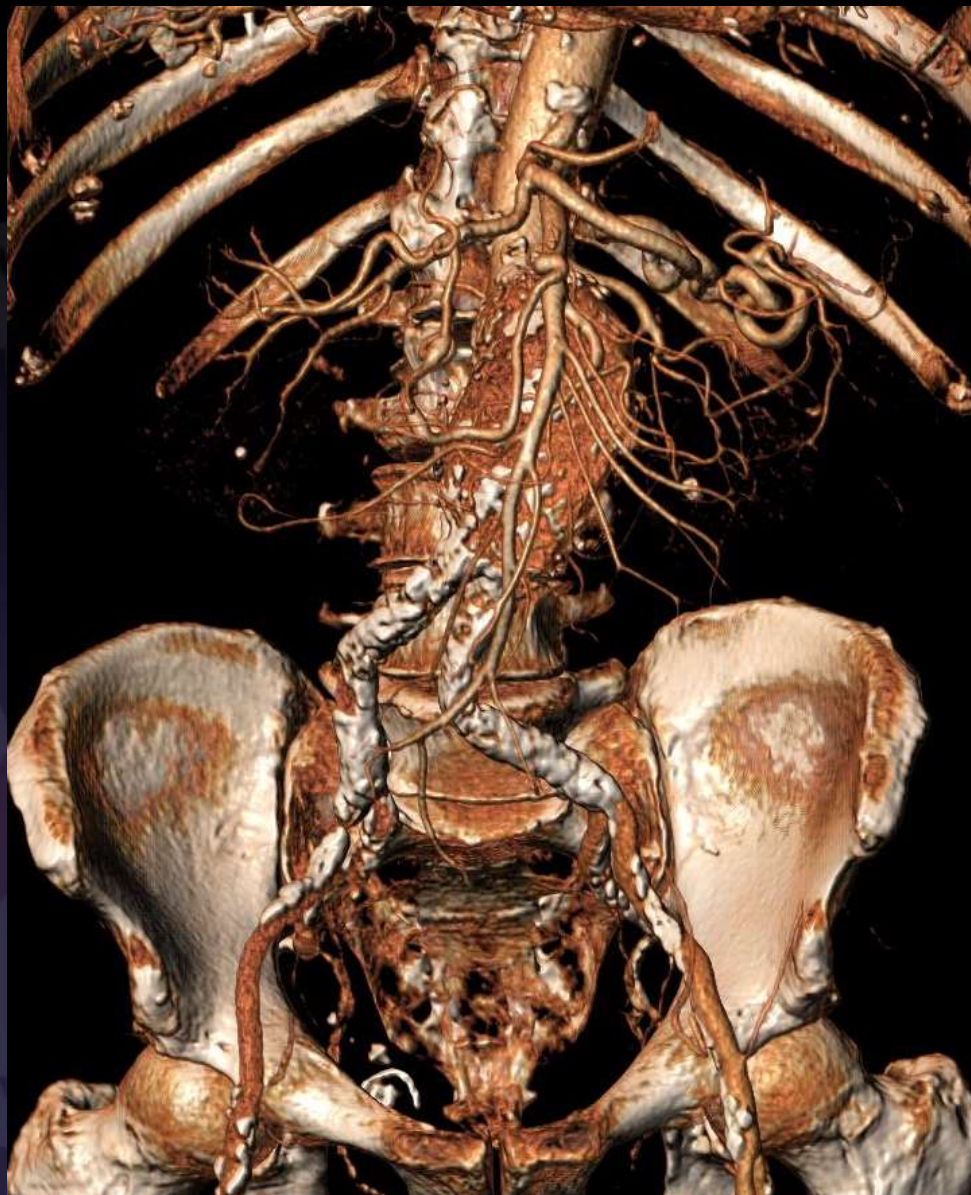


# CASE

- 66 years old male patient
- COPD, CAD (CABG+stenting), DM, Mitral valve insufficiency, Cardiac failure, Pneumonic hypertension, Renal impairment, current smoker, alcohol user.
- Juxtarenal AAA, 6.4 cm
- Unfit for open repair, turned down for standard EVAR at several centers
- Unsuitable for fEVAR due to severe calcification and narrowing of the iliacs
- Patient strongly wanted to undergo endovascular repair

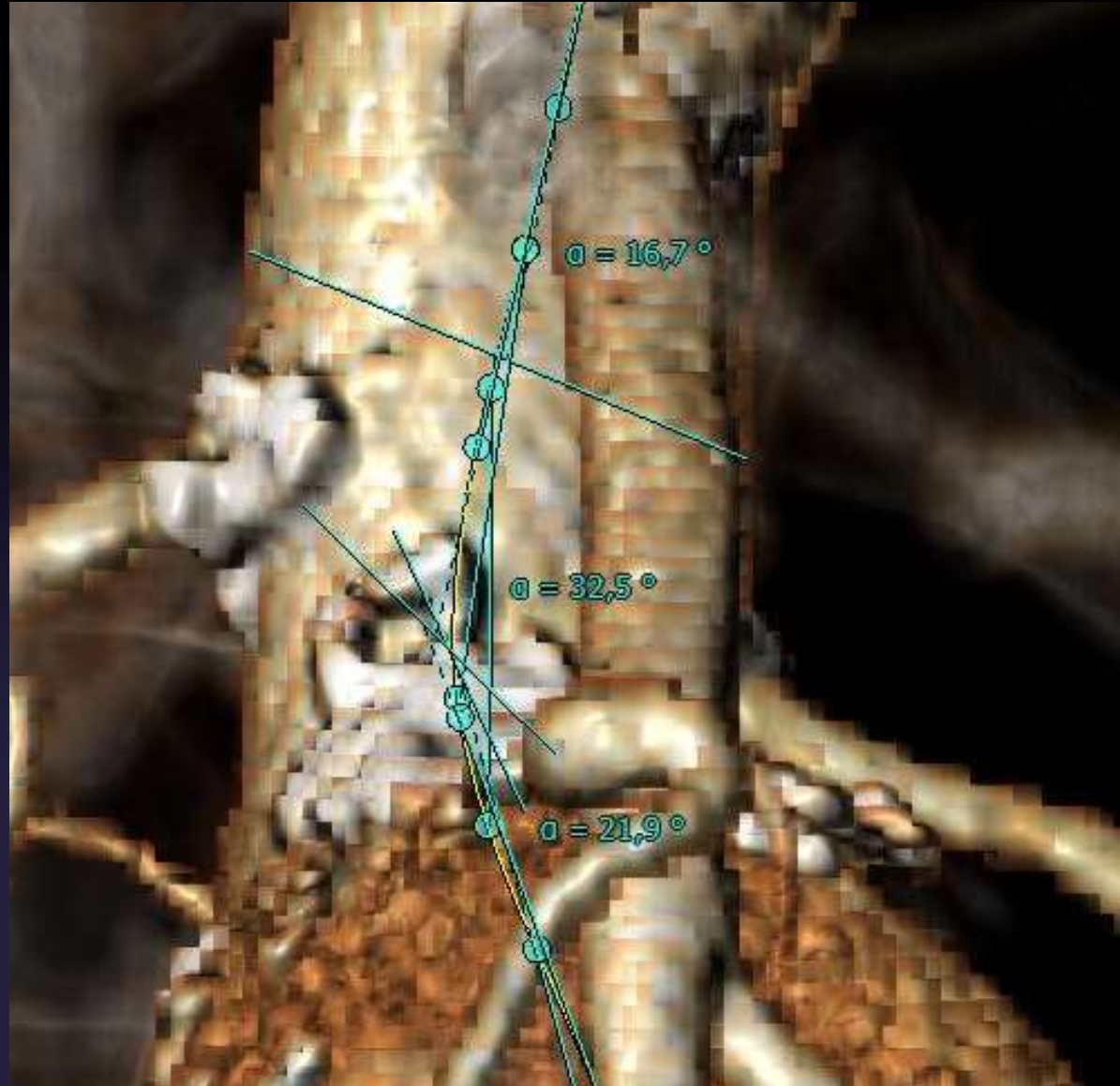


# CASE



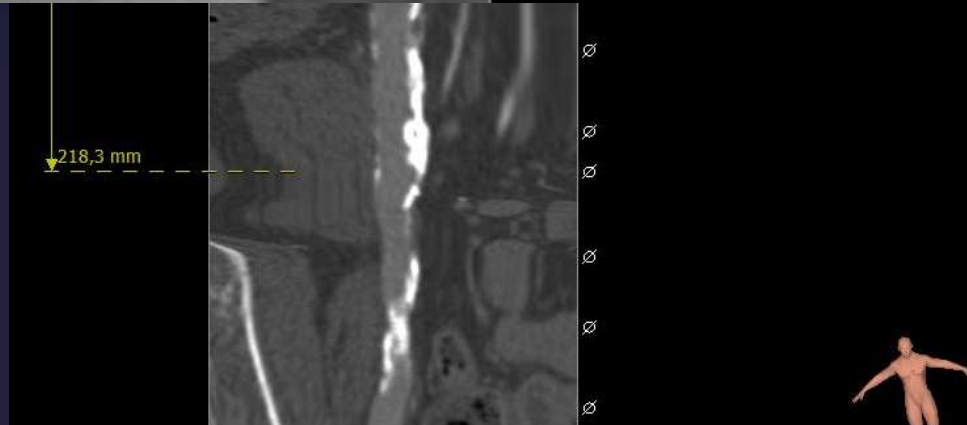
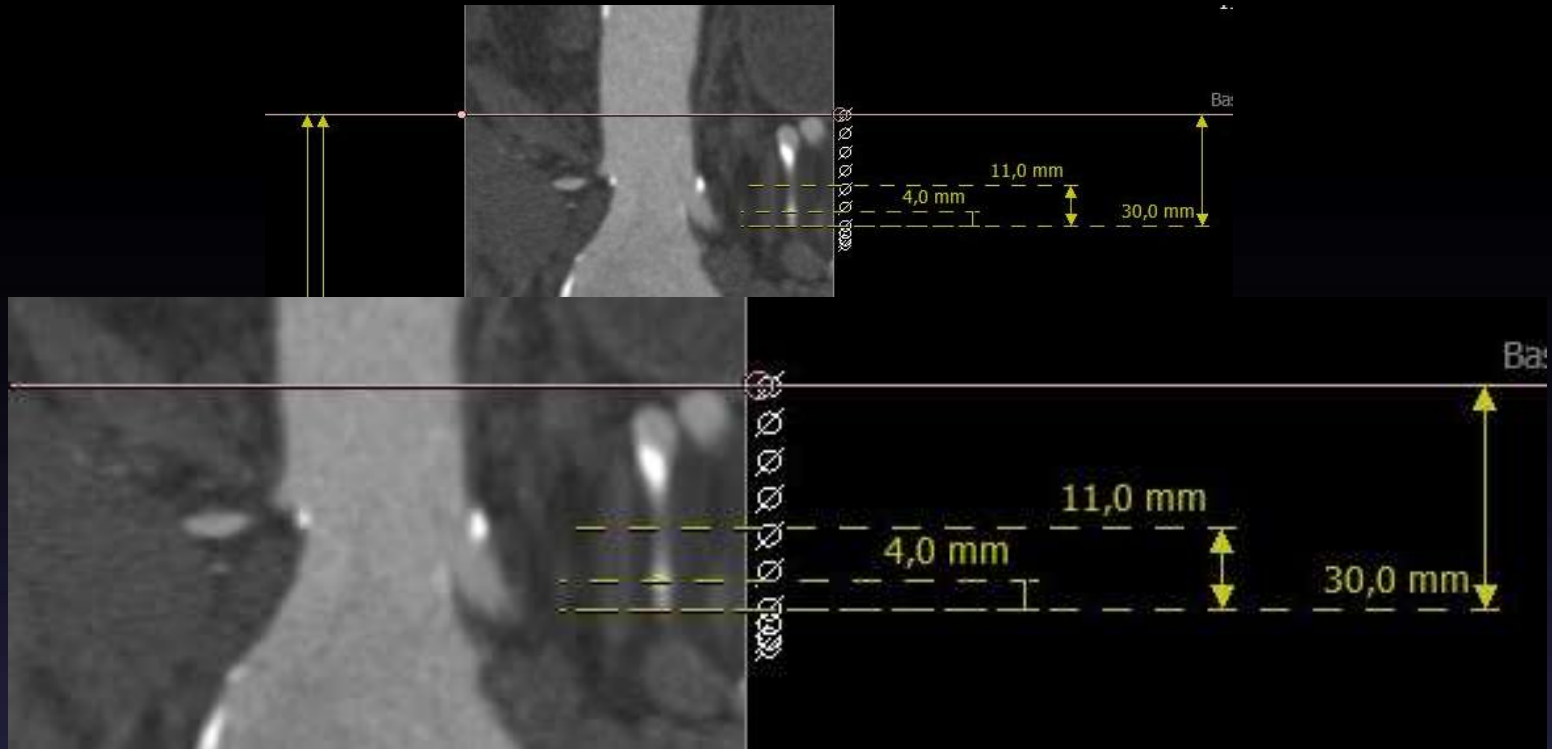


# Measurements / AAA





# Measurements / AAA



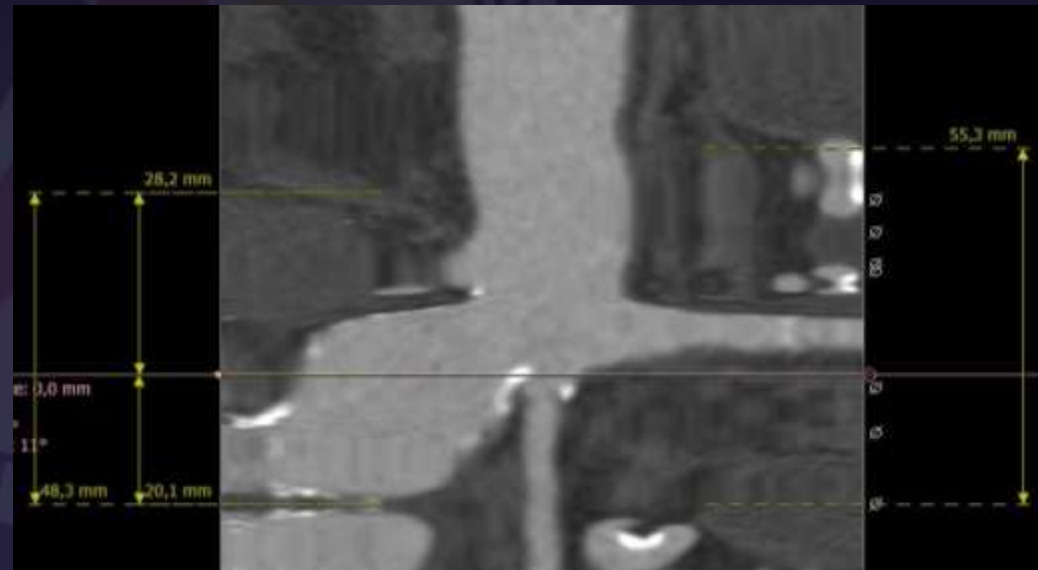


# Measurements / RRA





# Measurements / LRA





# Planning

## EVAR + Double chimney (RRA + LRA)

- **Endurant II stent graft**
  - Main body: 32-14 x 103 mm
  - Rt extension: 16-13 x 156 mm
  - Lt extension: 16-13 x 156 mm
- **V12 Advanta balloon-expandable covered stents**
  - 5 x 38 mm (RRA)
  - 5 x 59 mm (LRA)





# Planning



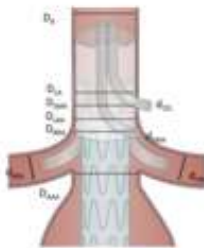
UNIVERSITY OF  
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DEPARTMENT OF VASCULAR SURGERY  
UNIVERSITY HOSPITAL OF LARISSA  
CHAIRMAN: Prof. ~~John~~ *Chionides*

## Chimney EVAR worksheet

Patient's name: CASE 3    Operation date:



### Chimneys

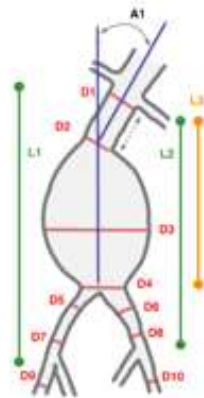
Diameter	mm	Diameter	mm
D <sub>ca</sub>	24.5	<del>d<sub>ca</sub></del>	-
D <sub>cel</sub>	-	<del>d<sub>cel</sub></del>	-
D <sub>SMA</sub>	24.8	<del>d<sub>SMA</sub></del>	5.1
D <sub>RRA</sub>	24.1	<del>d<sub>RRA</sub></del>	4.8
D <sub>LRA</sub>	23.3		
D <sub>AAA</sub>	21.7		

CEL: -

SMA: -

RRA: 5 x 38 mm (V12 *Advanta*)

LRA: 5 x 59 mm (V12 *Advanta*)



### AAA

Measurements	mm	Meas./pts	mm
D1	24	D9	9
D2	25	D10	9
D3	59		
D4	29	L1	219
D5	14	L2	217
D6	14	L3	125
D7	11	L4	-
D8	10		

Main body: 32-14 x 103 mm

**R** extension: 16-13 x 156 mm

**Lt extension**: 16-13 x 156 mm



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### Planning

Main body access:     Right     Left

Distal landing zone **R**:    CIA

Distal landing zone Lt:    CIA

For embolization:    -

Required special material:    2x ANL (70cm)



### C-ARM Configuration

CA:    LAO 89° Caudal 12°

SMA:    LAO 89° Caudal 10°

RRA:    RAO 2° Cranial 22°

LRA:    LAO 15° Cranial 13°

RIA:    LAO 29° Caudal 4°

LIA:    RAO 89° Caudal 5°





# 1st month follow-up

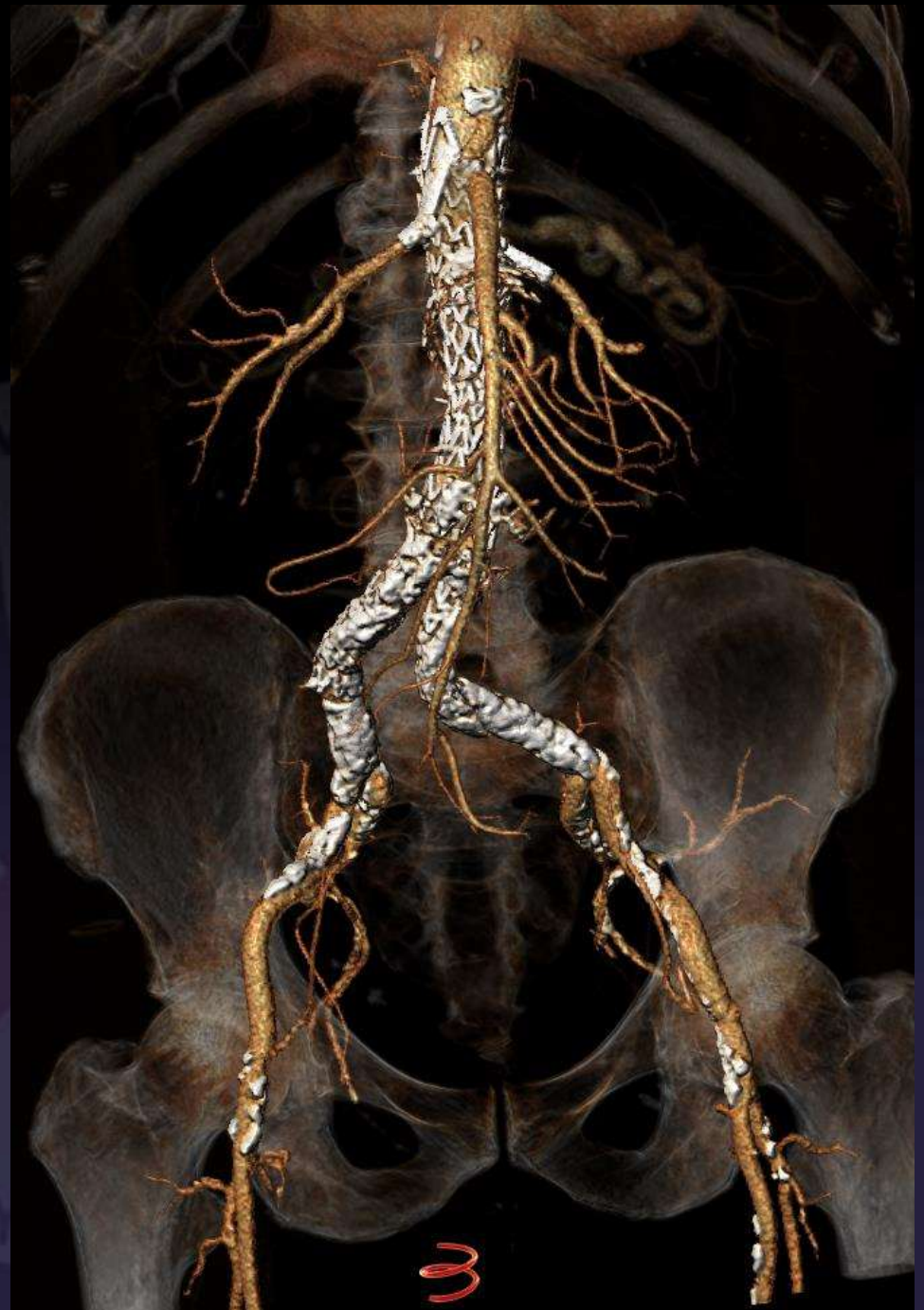
- **Clinical evaluation:** clinical examination ok  
no problems reported  
good urine output  
blood tests ok
- **CT scan:** adequate graft positioning  
no endoleak  
patent target vessel  
no graft related complications

# Follow-up (1<sup>st</sup> month)





# Follow-up (1<sup>st</sup> month)







***Thank you for your attention !!***



**Larissa University Hospital**





Institute  
of Vascular Diseases (IVD),  
Greece

**LIVE** Larissa  
May 14-16  
2020

**SEMINAR** edition <sup>NEW</sup>

