



# Difficult Saves and Complications

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**Chairman - Asia Pacific Vascular Society**

**Director - TCT India Next**

**President - International Society of Endovascular Specialist (ISEVS - Indian Chapter)**

**Vice President - Indian College of Cardiology**

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# Disclosure Statement of Financial Interest

**I, Dr.NNKhanna, DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.**

- 71, Male
- Smoker
- Hypertensive
- Diabetic
- Sarcoidosis
- Descending thoracic aneurysm
- Post TEVAR (DEC 2015), at outside hospital

- Developed 102 grade fever post TEVAR and was put on broad spectrum parenteral antibiotics but did not respond
- After 2 months patient developed recurrent hematemesis ,repeat CT was done which showed
  - Type I endoleak at proximal edge of stent graft
  - Stent graft actually placed within aneurysm proximally not covering the neck
  - Gas filled cavities around stent graft
  - aorto-oesophageal fistula

- Patient was admitted at IAH on 12<sup>th</sup> may 2015
- PET CT revealed active infection around the stent graft and mediastinum and AOF
- Upper GI endoscopy revealed AOF at 30 cm of incisor teeth . Revealing the stent graft and struts clearly visible through AOF

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Im: 256/512  
Se: 9

P L D H Y A N I 71 Y / M  
10614720  
15-11-1945 M  
Indraprastha Apollo Hospitals 12  
1  
PET^01\_Apollo\_PET\_NC\_CECT\_IWB (Adult)  
ARTERIAL 1.0MM  
ARTERIAL

GAS

GAS

GAS

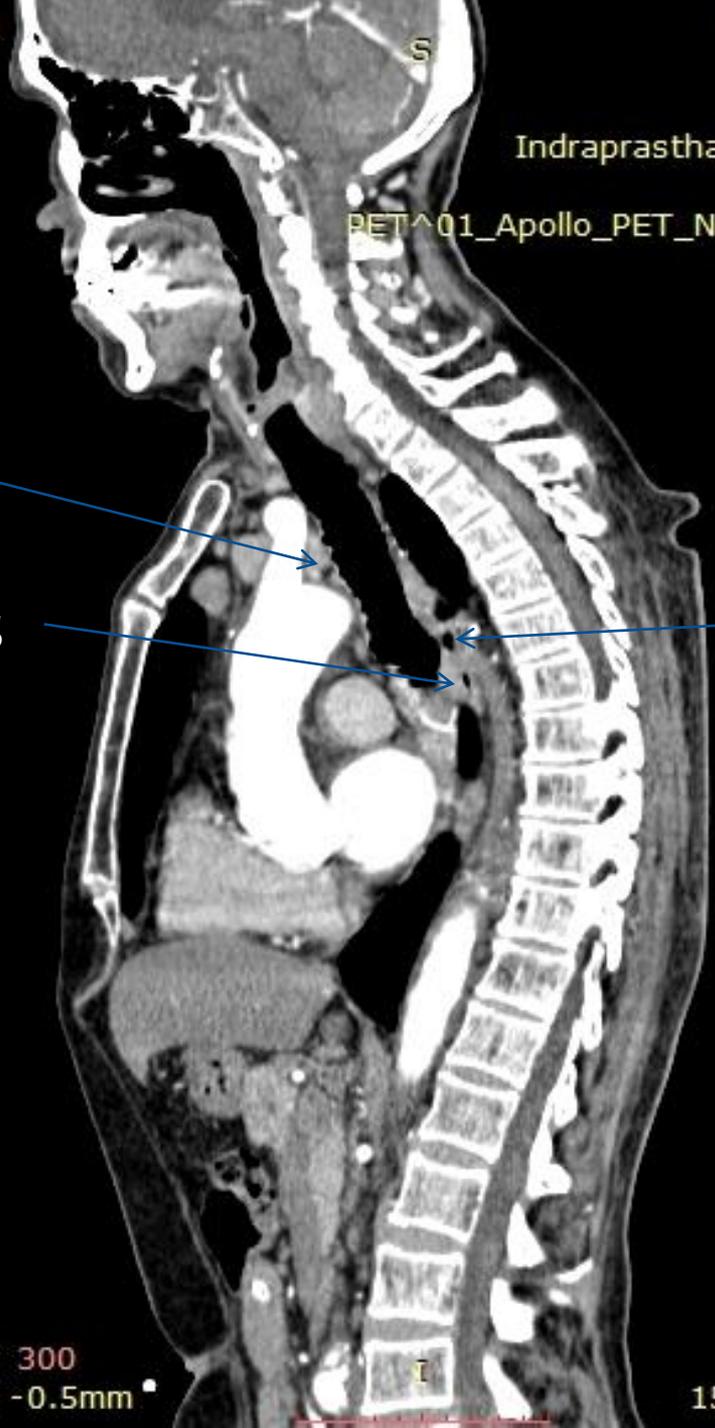


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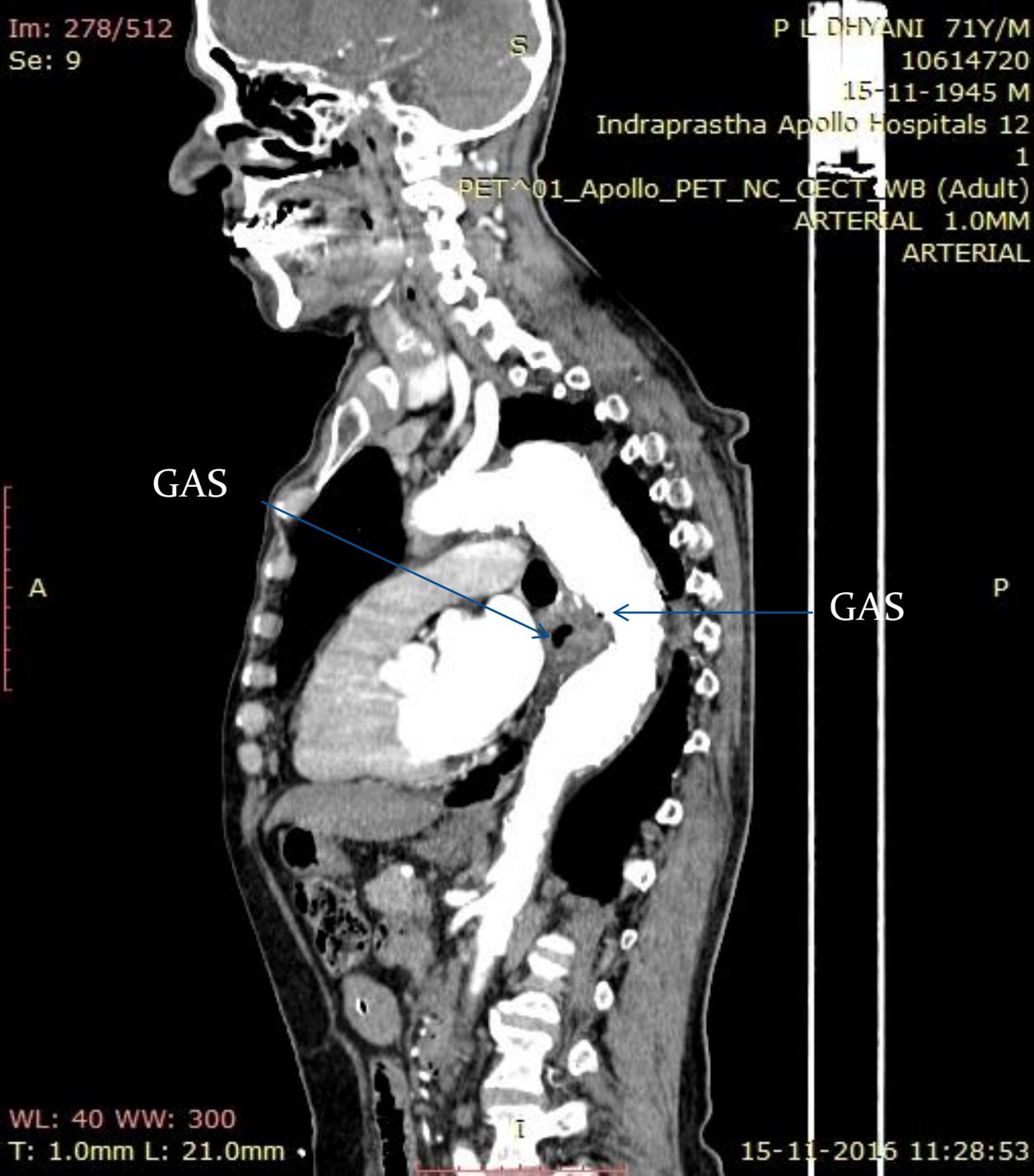
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P L DHYANI 71Y/M  
10614720  
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Indraprastha Apollo Hospitals 12  
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PET^01\_Apollo\_PET\_NC\_CECT\_1WB (Adult)  
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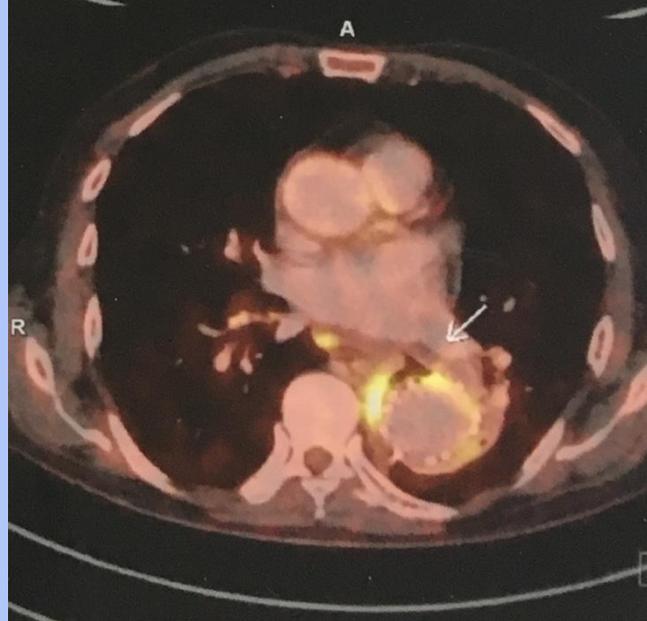
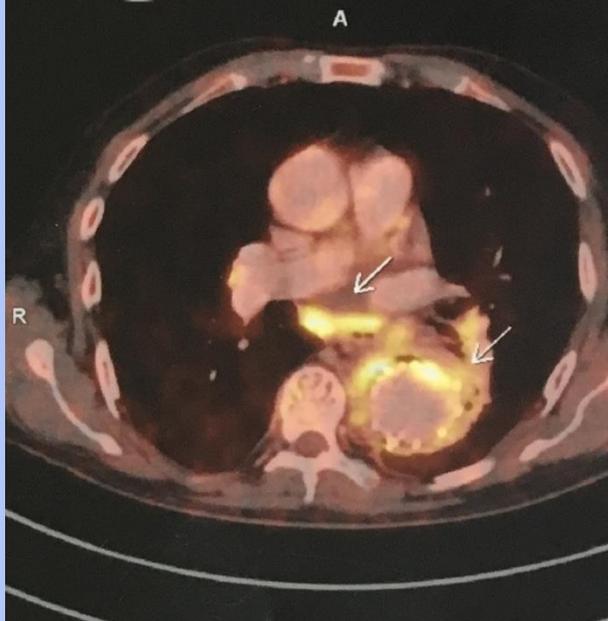
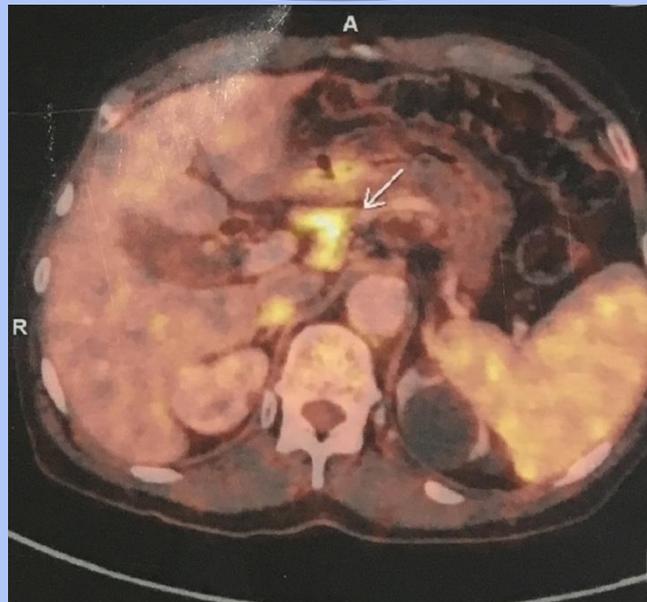
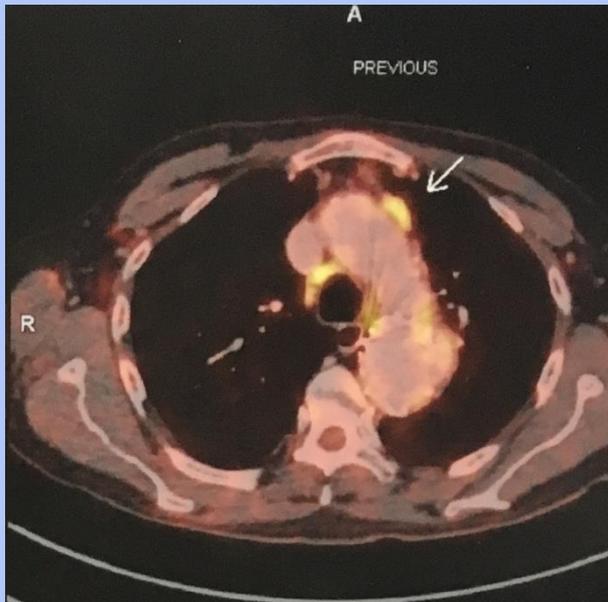
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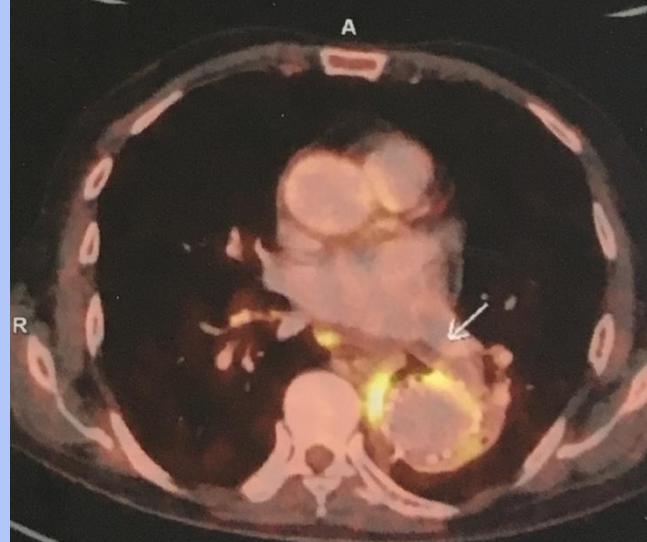
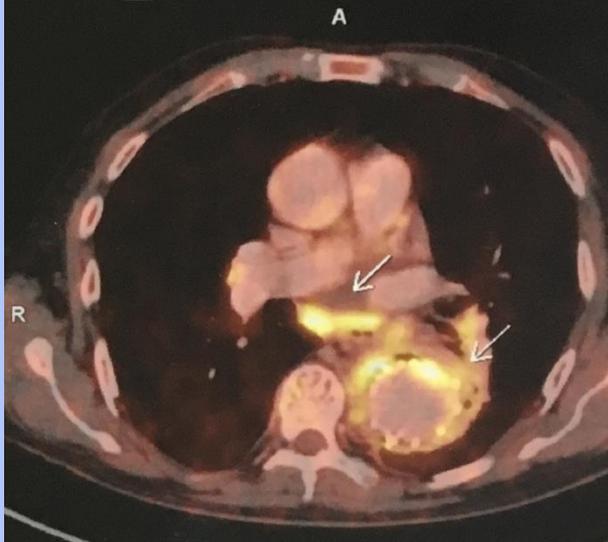
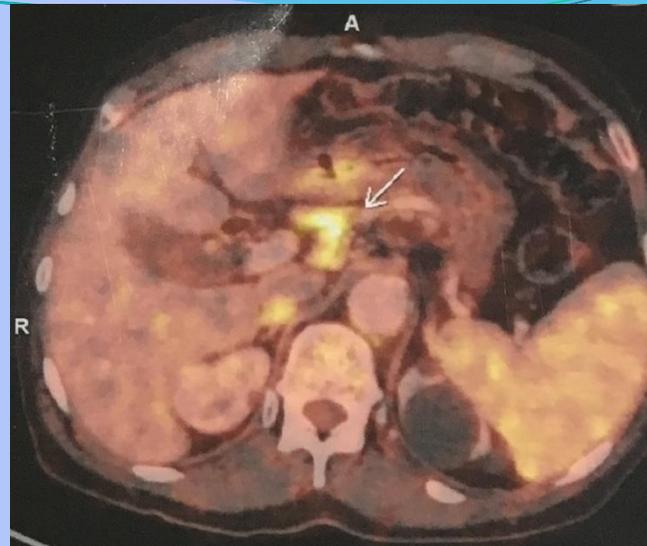
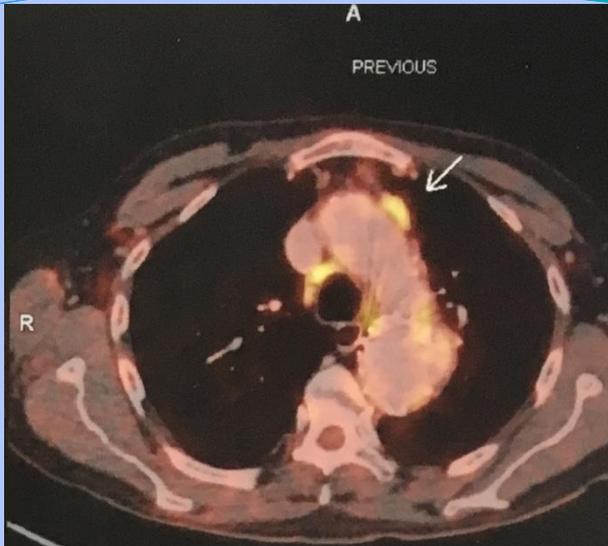
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- Patient was put on four drug ATT and broad spectrum antibiotics
- Percutaneous Feeding jejunostomy on 17-05-16
- Patient referred for removal aortic stent graft, repair of AOF and aortic interposition graft surgical refusal five most popular CVTS surgeons of country of India and also by famous aortic surgeons of the world(discuss in how to do session during APVIC 8 in June 2016)
- Discharged with advice to continue ATT and feeding through jejunostomy



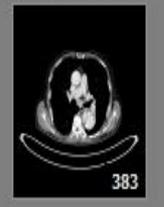
- On follow up patient gained weight and became afebrile but hematemesis continued
- Was readmitted for revision TEVAR on 14-11-16
- Blood cultures and sputum cultures were negative and TLC normal
- Repeat PET CT showed decreased metabolic activity in mediastinum and periaortic tissue



## F-18 FDG whole body position emission scan

Chest: FDG avid (SUV max 5.47, previous 6.1), bilateral supraclavicular and axillary nodes are still seen, largest left supraclavicular nodes measures 1.4 cm (previous 1.5) in size. FDG avid (SUV max 8.35, previous 11.9) mediastinal nodes are still seen in pre and paratracheal, prevascular, A-P window, subcarinal and bilateral hilar locations, largest prevascular nodes measures 2.2cm (previous 2.2 cm) in size. Large aneurysm is noted in descending aorta. Endovascular stent is extending from D4 to D10 vertebrate. FDG avid (SUV max 11.34, previous 14.1) soft tissue thickening is seen in the wall of aneurysm intra mucosal air is still seen at level of D8 vertebrate communicating with esophageal lumen (A-E fistula).

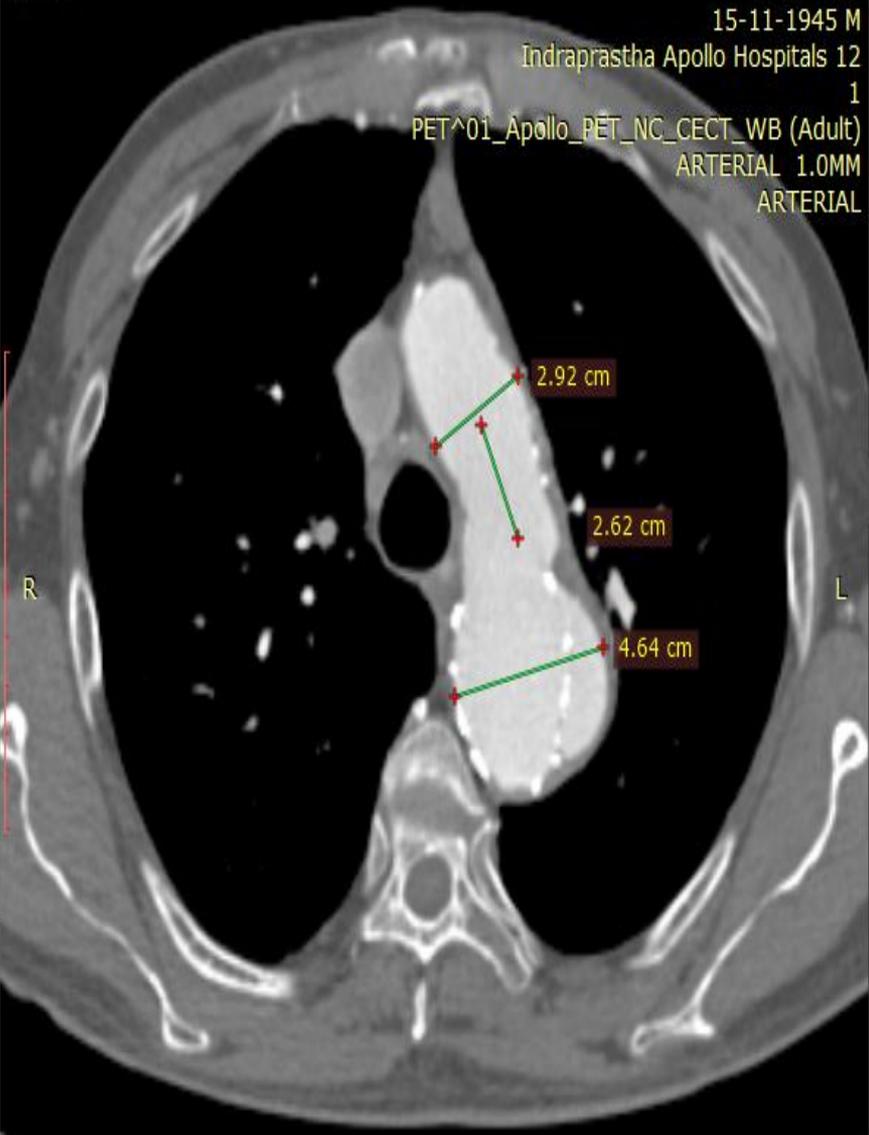




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P L DHYANI 71Y/M  
10614720  
15-11-1945 M  
Indraprastha Apollo Hospitals 12  
1  
PET^01\_Apollo\_PET\_NC\_CECT\_WB (Adult)  
ARTERIAL 1.0MM  
ARTERIAL



X: 323 Y: 291 Val: -872  
WL: 72 WW: 906  
T: 1.5mm L: -73.0mm  
201mA 120kV  
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P

Im: 233/512  
Se: 9

S

P L DHYANI 71Y/M  
10614720  
15-11-1945 M  
Indraprastha Apollo Hospitals 12  
1  
PET^01\_Apollo\_PET\_NC\_CECT\_WB (Adult)  
ARTERIAL 1.0MM  
ARTERIAL



WL: 133 WW: 798  
T: 1.0mm L: -158.4mm  
15-11-2016 11:28:53

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Im: 187/383  
Se: 9

P L DHYANI 71Y/M  
10614720  
15-11-1945 M  
Indraprastha Apollo Hospitals 12  
1  
PET^01\_Apollo\_PET\_NC\_CECT\_WB (Adult)  
ARTERIAL 1.0MM  
ARTERIAL

3.76 cm

X: 328 Y: 320 Val: -891  
WL: 72 WW: 906  
T: 1.5mm L: -109.0mm

190mA 120kV  
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Im: 298/512  
Se: 9

P L DHYANI 71Y/M  
10614720  
15-11-1945 M  
Indraprastha Apollo Hospitals 12  
1  
PET^01\_Apollo\_PET\_NC\_CECT\_WB (Adult)  
ARTERIAL 1.0MM  
ARTERIAL

WL: 133 WW: 798  
T: 1.0mm L: -95.0mm

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- TEVAR procedure challenges

- Large angulation at aortic arch
- Mismatch between aortic arch and stent graft
- Short neck and dominant left subclavian

Successful TEVAR plus chimney (C-TEVAR) procedure was done 23-11-16 (ICE endovascular course)

Hematemesis stopped and patient was discharged after a week



- Patient readmitted on 17-12-16 with swelling in arms – Pseudo aneurysm





PHILIPS

P L DHYANI 71 M

16/12/2016

04:43:12PM

TIS0.4 MI 1.1

DR PKG

22939

APOLLO DELHI

L11-3/Venous

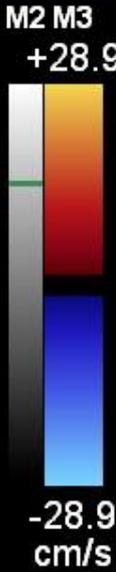
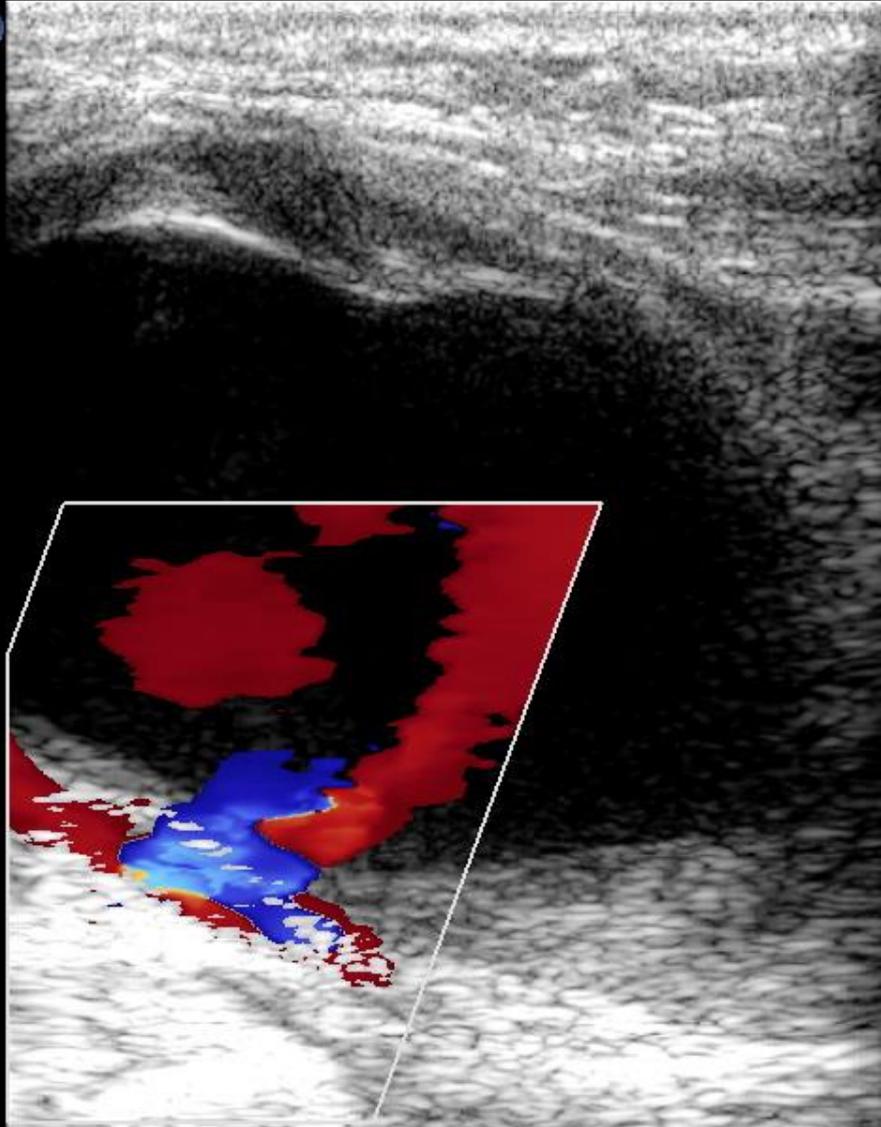
FR 14Hz  
5.0cm

**2D**  
65%  
C 52  
P Low  
Pen

**CF**  
80%  
3.6MHz  
WF Med  
Med



P



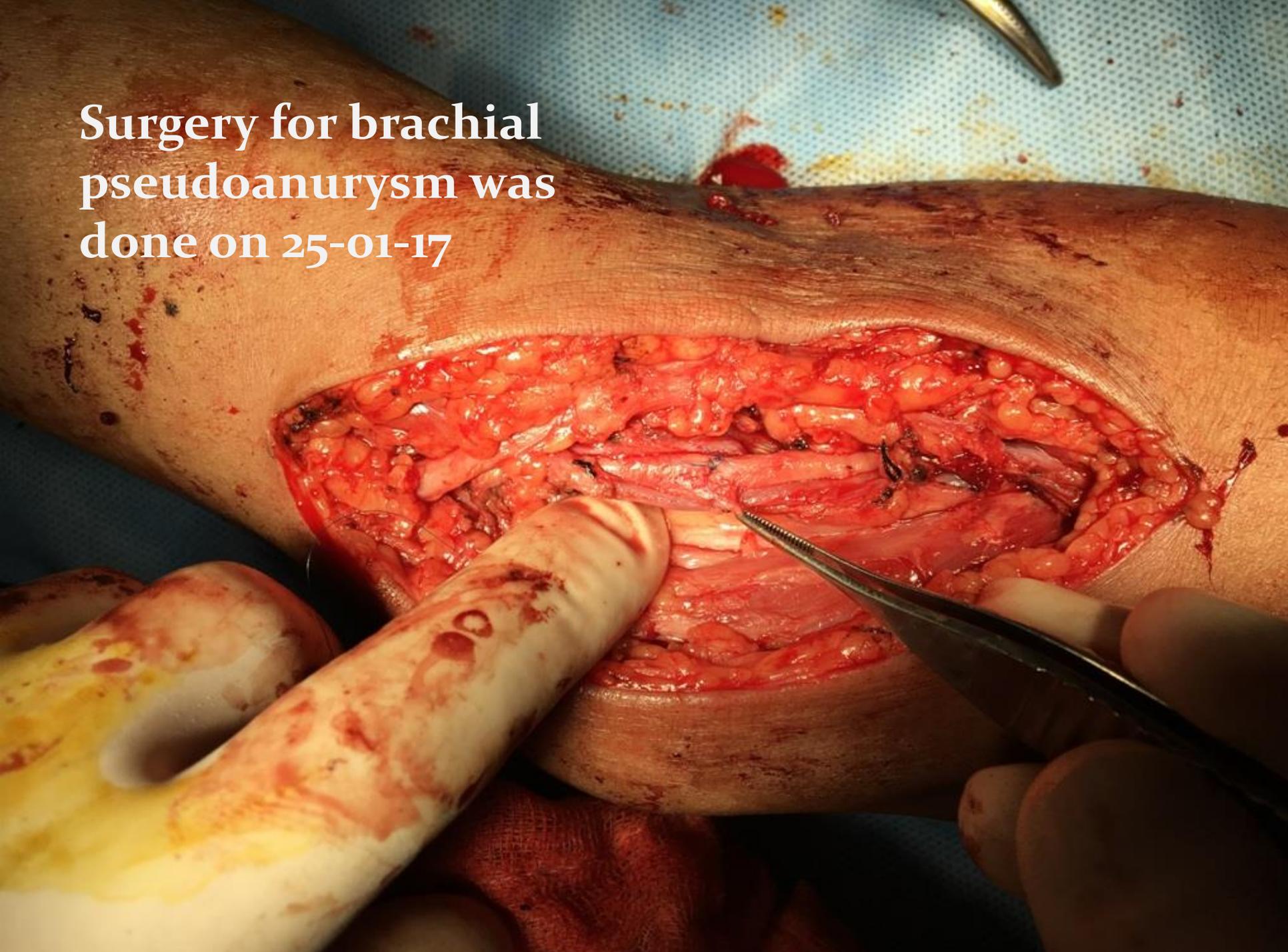
5

- Procedure - Percutaneous Thrombin with balloon occlusion of brachial artery

**Surgery for brachial  
pseudoaneurysm  
was done on 25-01-17**



**Surgery for brachial  
pseudoaneurysm was  
done on 25-01-17**



# Patient fed up with feeding jejunostomy for 6 months

- Plan for endoscopic clipping /banding (13-01-17 and 21-01-17)

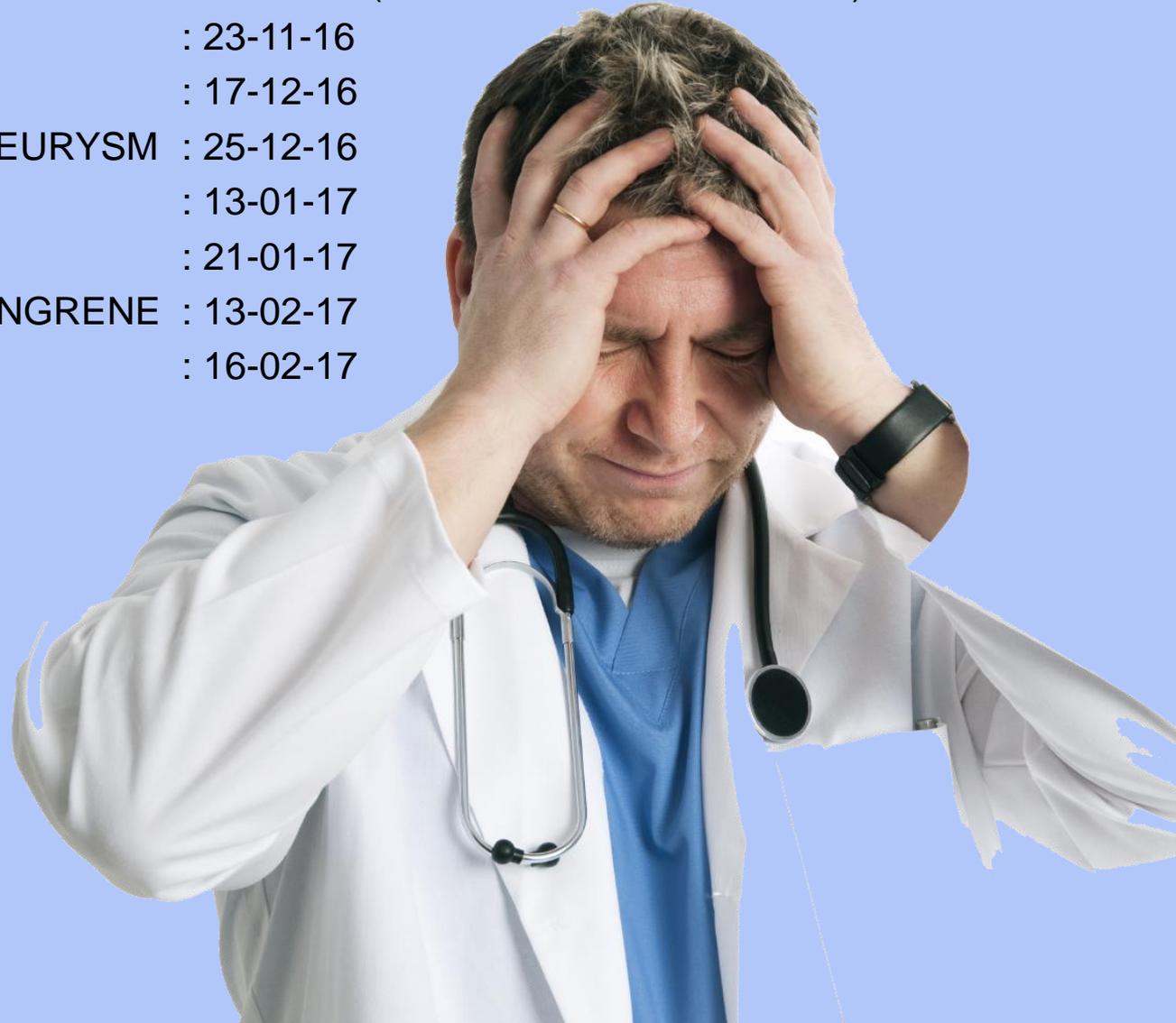
- Patient was very happy and recuperating



- Suddenly developed acute abdominal because of volvulus ,because of intestinal twisting around indwelling feeding jejunostomy tube

- Emergency laparotomy was done on 13.02-17.
- But succumbed on 16-02-17

TEVAR : 15-12-15  
ADMISSION : 12-05-16 (MEDIASITINIS + AOF)  
SURGICAL TURNDOWN : 15-06-17  
READMISSION : 17-05-16 (FEEDING JEJUNOSTOMY)  
CHIMNEY + TEVAR : 23-11-16  
PTI : 17-12-16  
SURGERY FOR PSEUDOANEURYSM : 25-12-16  
ENDOSCOPIC CLIPPING : 13-01-17  
ENDOSCOPIC BANDING : 21-01-17  
ACUTE ABDOMEN WITH GANGRENE : 13-02-17  
DEATH : 16-02-17



**THANK YOU**

