

# Stenting angulated aortic aneurysm neck before endovascular aortic repair: a case report

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## Disclosure

Speaker name:  
...Mr. Mohamed Omar Elfarok.....

- I do not have any potential conflict of interest
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## How to measure aortic neck angulation?

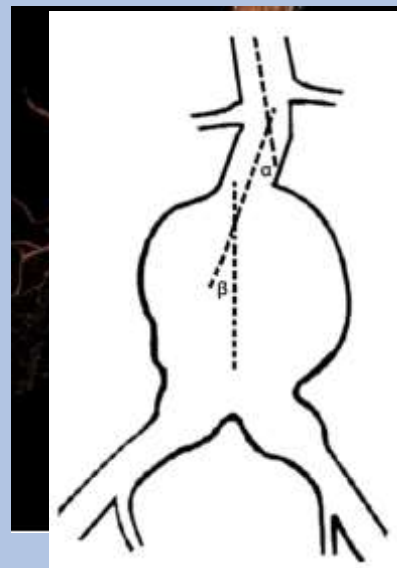
The best answer

### Validation of a new standardized method to measure proximal aneurysm neck angulation

Jasper W. van Keulen, MD,<sup>a</sup> Frans L. Moll, MD, PhD,<sup>a</sup> Jip L. Tolenaar, MD,<sup>a</sup> Hence J. M. Verhagen, MD, PhD,<sup>b</sup> and Joost A. van Herwaarden, MD, PhD,<sup>a</sup> *Utrecht and Rotterdam, The Netherlands*

## The answer is

- a **center lumen line (CLL)** of the aorta was made, and a **three-dimensional (3D)** aortic reconstruction was obtained. The 3D reconstruction was turned 360° perpendicular to the CLL in the middle of the flexure. **The sharpest angle of the CLL** was considered the true angle of the aortic axis.
- There are three axis
  - 1- Supra-renal aorta
  - 2- Aortic neck
  - 3- Aortic sac



## Does the angle changes after EVAR?

Yes

ASTR

ORIGINAL ARTICLE

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### Changes in suprarenal and infrarenal aortic angles after endovascular aneurysm repair

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The infra-renal aortic neck angle **changed immediately** during the EVAR procedure, **due to multiple factors**, such as passage of the guidewire, the stent graft delivery system, and radial force of the stent graft. Only radial force of the stent affected aortic angle slowly and continuously after the EVAR procedure

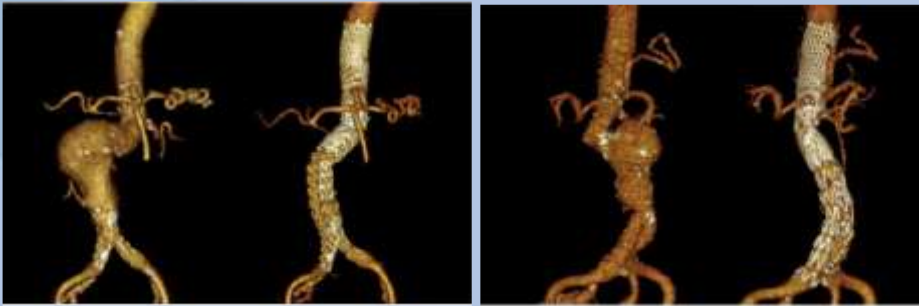
What happen if :

In angulated aortic neck

After EVAR

Putting self expandable Stent

**Post EVAR** self expandable stent  
straighten the neck



## What if stenting done before EVAR?

Case report

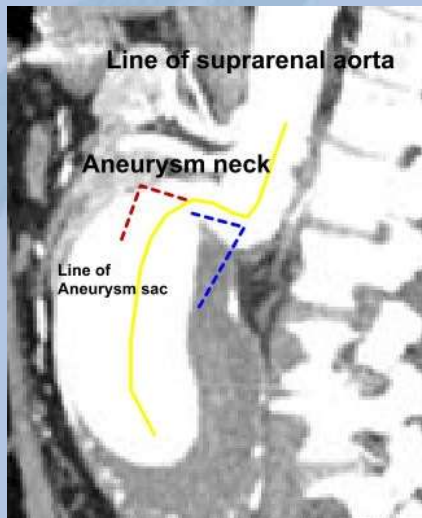
**Stenting Angulated Aortic Aneurysm Neck before Endovascular Aortic Repair:  
a case report**

Mohamed El-Farok\*, Amr Fathey, Peter Brennan, Andrew Choong

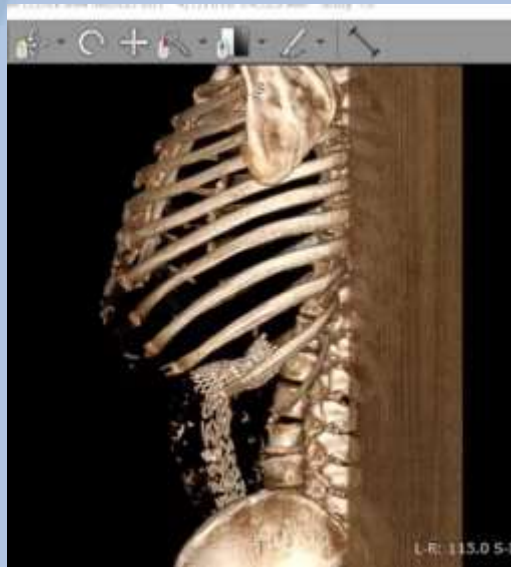
Address: General Organization of Teaching Hospitals and Institutes, Cairo, Egypt

To the best of my knowledge this is the **first time to report a prophylactic self expandable nitinol stent in severe angulated neck for remodeling**, Palmaz and Ev3 Max balloon expandable stents has been reported before but not self expandable one, We think this technique lower the aortic neck angulation and decrease the secondary intervention rate in short term results

## Difficult angle



What



# Does angulated necks do badly ?

Eur J Vasc Endovasc Surg (2015) 49, 19–27

## Mid-Term Results of EVAR in Severe Proximal Aneurysm Neck Angulation

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### WHAT THIS PAPER ADDS

Proximal neck angulation is a risk factor for adverse events following endovascular aneurysm repair (EVAR). The first study to assess mid-term outcomes and morphology changes in the proximal neck in patients with severely angulated proximal neck treated with a late generation endograft is presented. This study shows that clinical outcome following EVAR in patients with severe proximal neck angulation is not significantly different from those patients with more favorable proximal anatomy.

**Steffi Anding** <steffi.anding@provascular.de> 12/9/16

to me

Dear Mr. mohamed elifarok,  
As I already informed you - your abstract on "Stenting Angulated Aortic Aneurysm Neck before Endovascular Aortic Repair : a case report" has been accepted by the scientific committee of **LINC 2017**.  
Due to the very interesting content it has been decided to have it as a lecture in one of our 7 plenary rooms instead of the originally planned poster presentation.

Your lecture will take place in/on/at:  
**ROOM 7 – SPEAKERS' CORNER Thursday, January 26, 2017**  
11:06 – 11:12 Stenting angulated aortic aneurysm neck before endovascular aortic repair:  
a case report Mohamed Elfarok





## Take home message

- We must standardize how we report Aortic neck angulation
- In expert hands , Angulated necks can give similar results to straight neck
- Pre deployment of self expandable stent before EVAR can improve our results

# Thank You