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# Inflammatory aortic wall development after EVAR: case report

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# Disclosure of Interest

## **Disclosure**

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✓ I do not have any potential conflict of interest

# Introduction (1)

- Peri-aortitis associated with inflammatory abdominal aortic aneurysm is a well known condition, usually treated by open or endovascular technique.
- Peri-aortic inflammation after endovascular aneurysm repair (EVAR) is on the other hand a quite rare condition.

## Introduction (2)

- **Post implantation syndrome (PIS)** after EVAR is an inflammatory response usually happening the first days after the procedure.
- An universally accepted definition is missing.

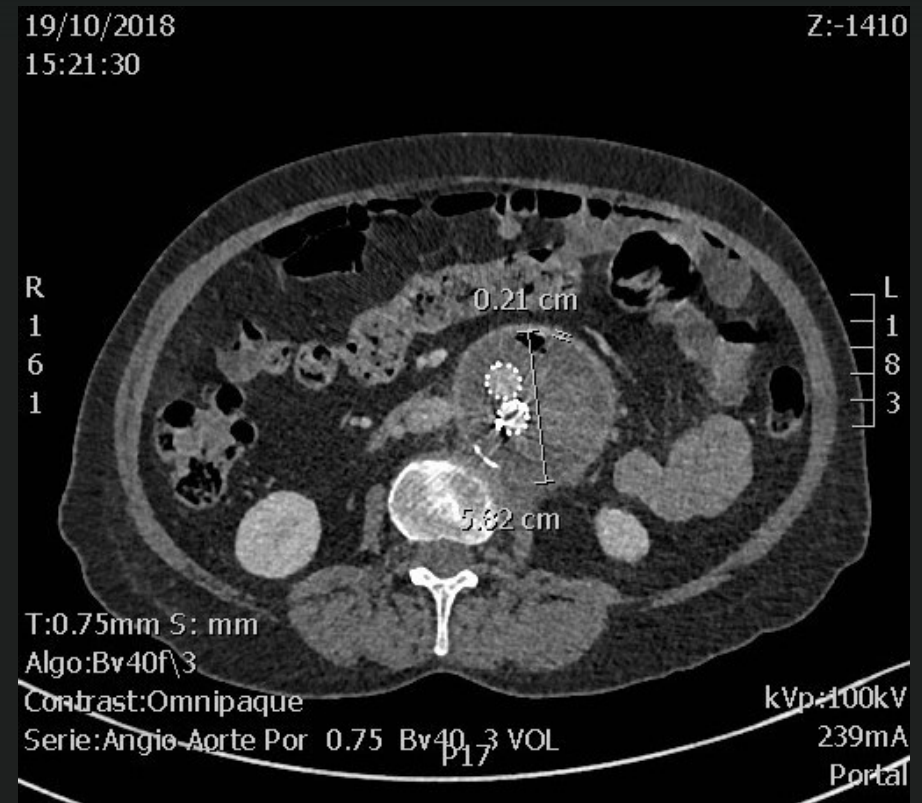
# Case Report (1)

- 72 years old female
- Followed since 2015 for subrenal aortic aneurysm
- Diameters: 2015: 3,6cm      2016: 4,7cm      2018: 5,5cm
- November 2018: EVAR without per or post op complication
- Lab test D+3: CRP 158,7 mg/L, WBC 11650/mm<sup>3</sup>
- Post EVAR CT Scan showed no evidence of endoleak or peri-aortitis

# Case Report (2)



Intra-operative

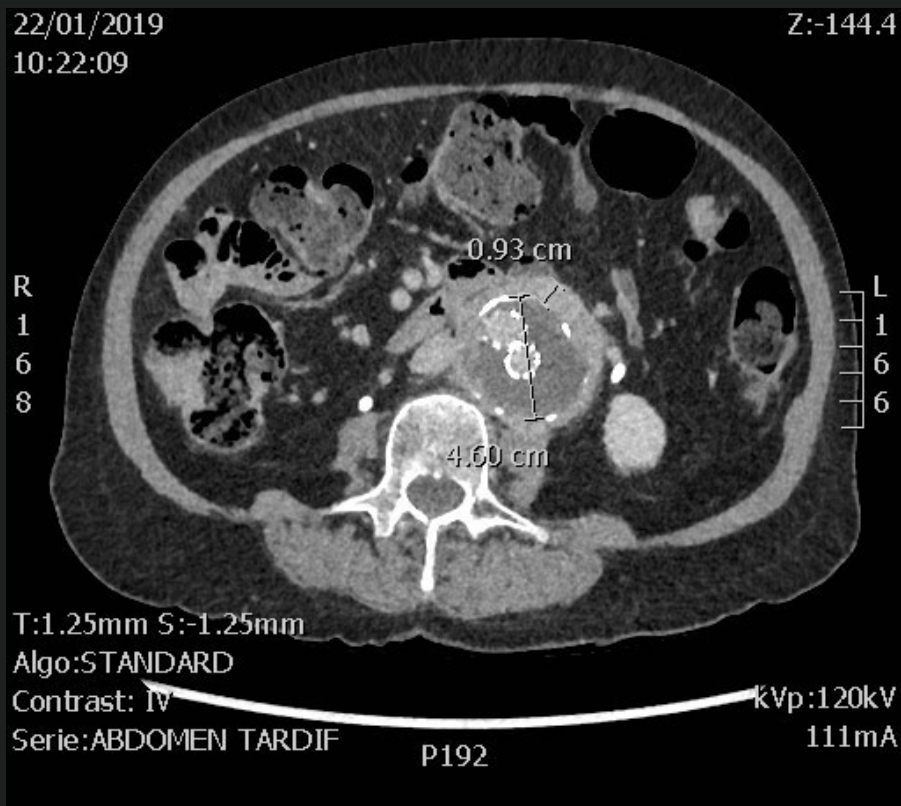


Post EVAR CT scan

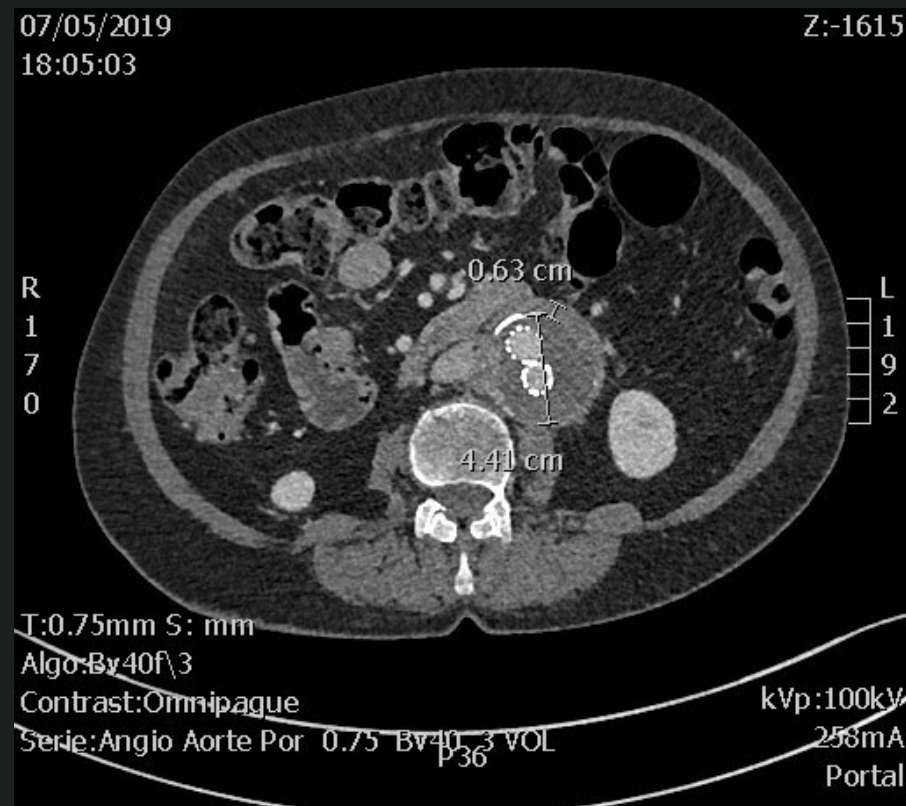
# Case Report (3)

- 3 months post EVAR:
  - Elevated CRP (22mg/L) with a normal count of WBC (6620/mm<sup>3</sup>)
  - CT scan: absence of endoleak, regression of the size of the aneurysm
  - Inflammatory peri-aneurysmal shell
- 6 months post EVAR:
  - Elevated CRP (33mg/L) with normal count of WBC (7820/mm<sup>3</sup>)
  - CT scan: absence of endoleak, regression of the size of the aneurysm
  - Regression of the size of the inflammatory shell

# Case Report (4)



3 months post EVAR



6 months post EVAR



# Discussion (1)

- Peri-aortic **inflammation** after EVAR is a rare but already described condition.<sup>(1,2,3,4)</sup>
- Inflammatory aortic wall development after EVAR could belong to the **P**ost **I**mplantation **S**ndrome (PIS).<sup>(5,6)</sup>
- PIS is defined by elevated WBC and CRP, associated with fever in an early phase after EVAR.

# Discussion (2)

- A recent study by Arnaoutoglou showed a correlation between PIS and cardiovascular or other **adverse event** during the first year after EVAR.<sup>(5,6)</sup>
- The inflammatory response in PIS is attenuated after the first month, but the risk of cardiovascular and other adverse event is still higher during the first year.<sup>(6)</sup>
- Whether it should be treated or not is not well defined yet.
- We need **further studies** to determine if a treatment is necessary, in order to lower this adverse event risk.

# Bibliography

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Thank u for your attention