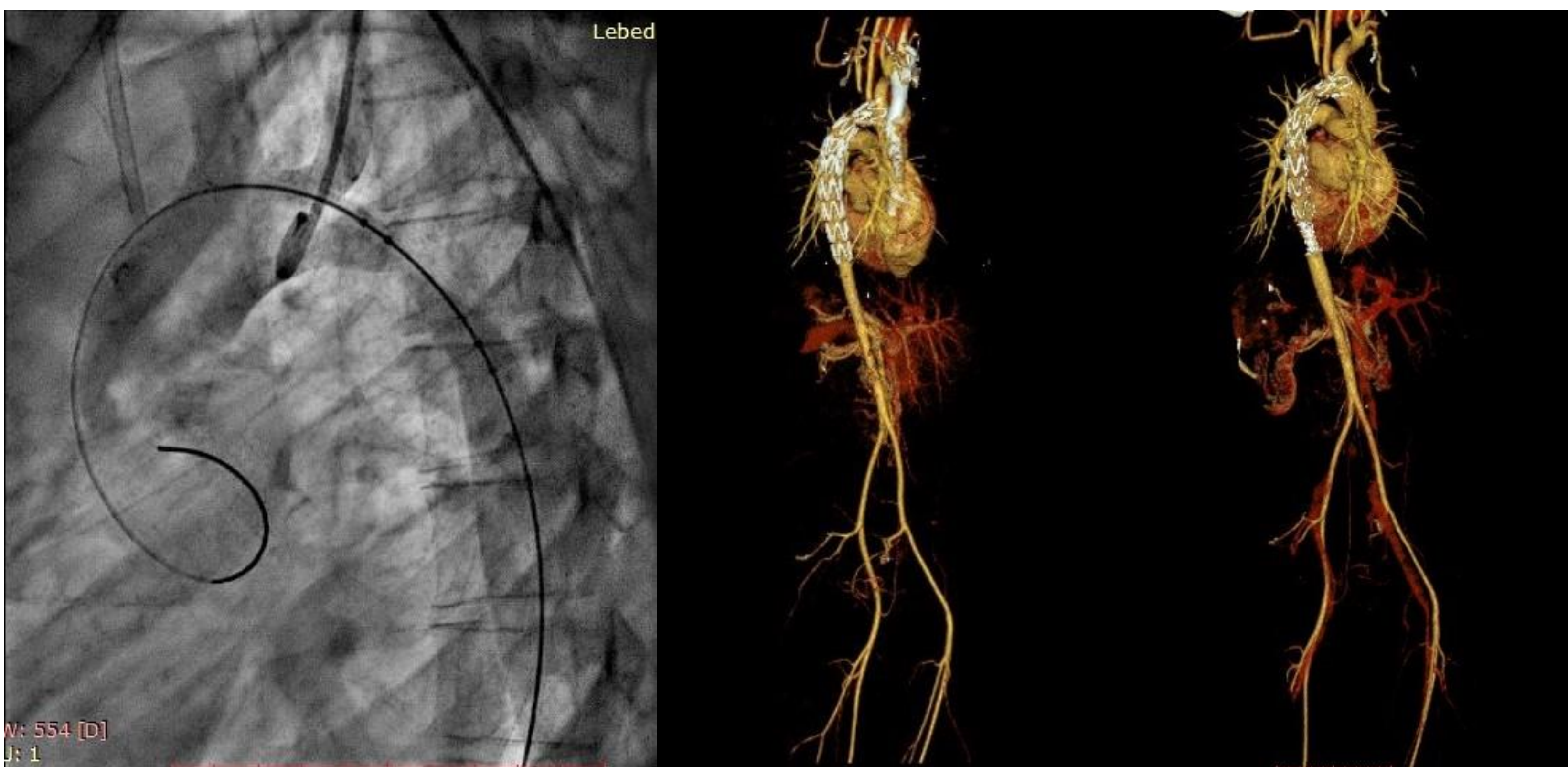


# The thoracic stent graft material individual intolerance.

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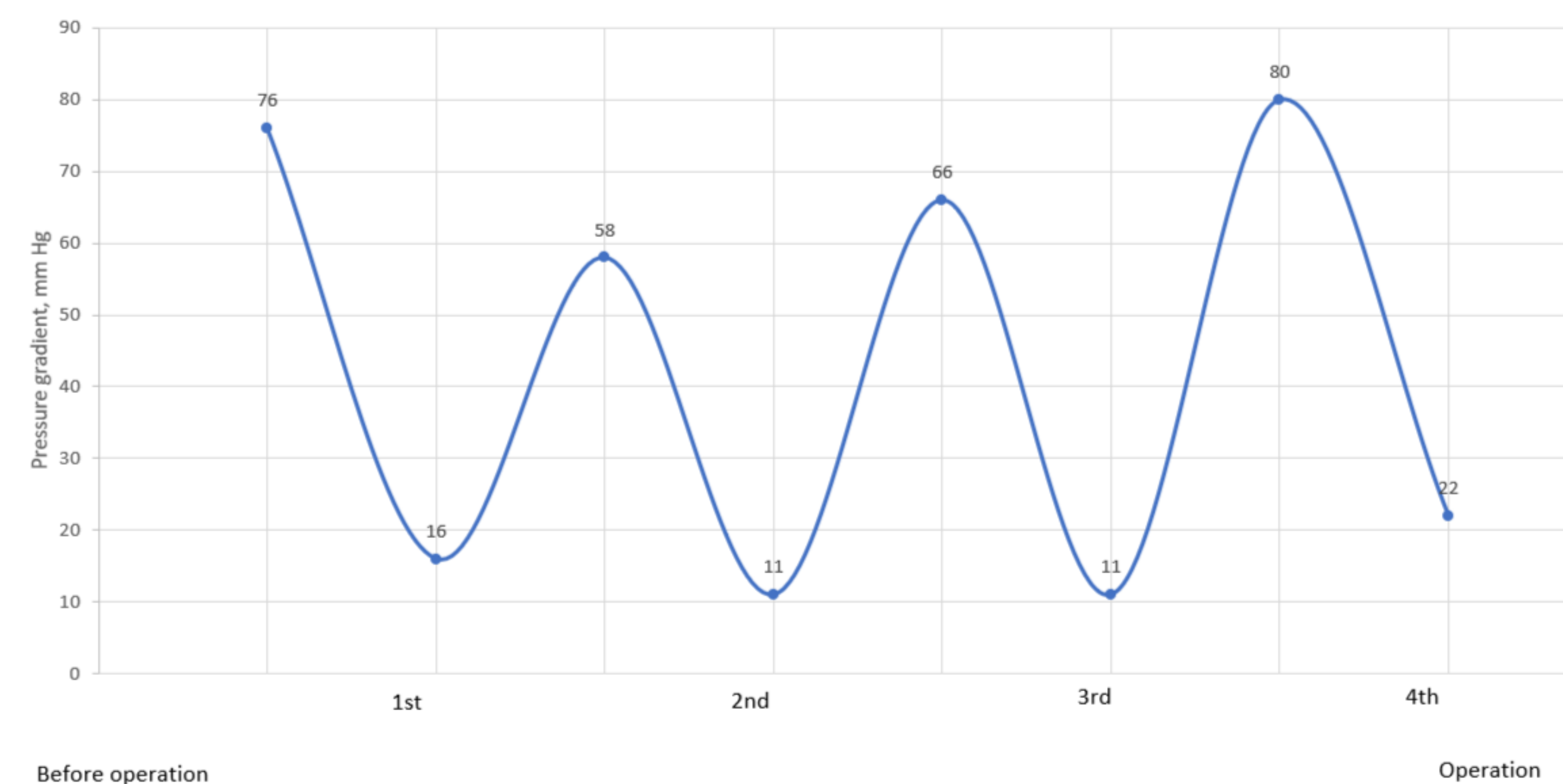
## Aim

to describe a case of repeated restenosis of the distal edge of a stent graft in a young patient with aortic coarctation.



## Methods

At the age of 11, the patient was verified with aortic coarctation. Parents refused surgical treatment, because of religious reasons. In 2016, during pregnancy, on the EchoCG – 76 mm Hg pressure gradient in the descending aorta was performed. Pregnancy was interrupted, due to high risks of complications. After that, from 2016 to 2018 the patient underwent four endovascular aortic repairs (diagram 1).



## Results

The patient underwent immunological examination, but ANA, and more specific anti-ENA and anti-DNA antibodies were not detected. Antibodies to cardiolipin and beta-2-glycoprotein also were within normal limit. The vasculitis screening including ANCA was negative. PET with fluorodeoxyglucose showed a diffuse hypermetabolism of glucose in the course of the walls of the thoracic aorta, where stent-graft exists. It is a marker of aseptic inflammatory process, probably related with a macrophage response to synthetic material, which is a part of the stent graft. Last control EchoCG showed that root, ascending aorta are not dilated. The shadow of the stent graft is visualized in the descending aorta. Blood flow in the descending aorta slightly accelerated -  $V_{max} = 2.36 \text{ m/s}$  with  $PPG = 22.2 \text{ mm Hg}$ .

## Conclusions

Perhaps this is the first case of individual intolerance of stent graft material in a patient.

### NOTE:

We have no conflicts of interest.