

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

### Vascular Diseases Quiz – Case 66

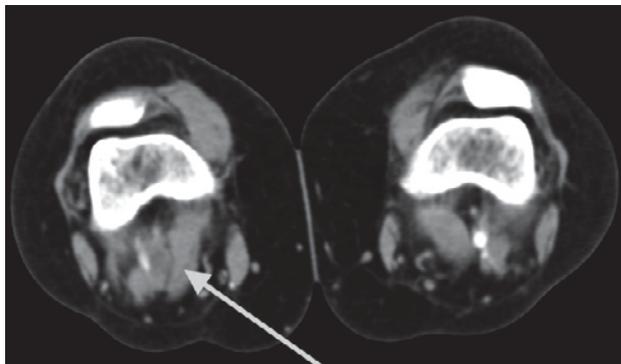
A 55-year-old woman suffered from severe pain located at the back of her right knee and right calf while walking. Maximum walking distance has been gradually reduced to 200 m over the past couple of years. Her past medical history was insignificant and she received no medication. She was a mild smoker since the age of 20. Blood cholesterol levels were within normal values. Atherogenic index is 1.1. A colour duplex scan revealed large cystic formations at the level of popliteal artery causing significant drop of the arterial flow velocity below the knee (fig. 1).

What is the most probable diagnosis?

#### Comment

*Cystic adventitial disease (CyAD) is a rare non-atherosclerotic vascular pathology of unknown origin, which results in intermittent claudication due to peripheral vascular insufficiency caused by compression of the arterial lumen by a cystic collection of mucinous material within the adventitial layer of the artery. The disease predominantly affects the popliteal artery (approximately*

*85%) of young to middle-aged men. While CyAD is most common in men (15fold), it can be diagnosed in women as well. The condition is confirmed with the assistance of computer tomography (CT) or magnetic resonance (MRI), but the initial diagnosis is often set by a colour duplex ultrasound scan. In situ bypass procedure was once considered the golden standard of treatment. Endovascular procedures for CyAD of the popliteal artery may be used, but the long-term results are still under scrutiny. A minimally invasive treatment of CyAD is the percutaneous puncture of the cysts with a large bore needle and the aspiration of the mucinous content, under ultrasound guidance.*



**Figure 1.** Cystic formation of the right popliteal artery compressing the lumen or the artery.

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#### References

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*Diagnosis: Cystic adventitial disease*