

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

### Vascular Diseases Quiz – Case 64

A 24-year-old female presented with unilateral edema of her left leg since a couple of days with gradual deterioration (fig. 1). The patient reported that the leg felt “tight” and that knee flexion is difficult. Past medical history is insignificant. The patient is otherwise fit and well. Distal leg pulses are palpable.

What are the possible differential diagnoses? What should the diagnostic work up be?

#### Comment

*Unilateral leg edema is a frequent complaint especially in young females. The differential diagnosis for this condition consists of a plethora of conditions and diseases; vascular or others (tab. 1).*

*In this case, the edema presented acutely within a couple of days. No arterial disease is suspected since the patient's demographics and pulses do not raise significant suspicion. Since the patient's past medical history was free, a colour duplex ultrasound scan and or serum D-Dimer should be requested to rule out deep vein thrombosis (DVT). If DVT is ruled out, a computed tomography (CT)*



**Figure 1.** Patient presenting with unilateral (left) leg edema.

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**Table 1.** Differential diagnosis of unilateral leg edema.

	Diagnosis
Acute	Deep vein thrombosis, superficial venous thrombosis, musculoskeletal injury, lymphangitis, Baker's cyst, knee pathology, cellulitis, arterial embolism/thrombosis, compartment syndrome, necrotizing fasciitis
Chronic	Chronic venous disease, lymphedema, complex pain regional syndrome type I, pelvic neoplasm, May-Thurner syndrome, idiopathic edema, reflex sympathetic dystrophy, congenital venous malformations, medication (non-steroidal anti-inflammatory drugs [NSAIDs], steroids, birth control), limb hypertrophy, lipedema, post-thrombotic syndrome, trauma, peripheral arterial disease

*venogram should be requested to examine if pelvic pathology (tumor, lymphoma, May-Thurner syndrome) is present. If all vascular causes for leg edema are excluded, then a systemic approach is necessary. In young females with unilateral leg edema of unknown origin is present and basic work up is normal then it is safe to consider it as idiopathic edema without the need of an exhausting investigation.*

#### References

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2. TAGO M, FUJIWARA M, TOKUSHIMA Y, YAMASHITA S, AIHARA H. May-Thurner syndrome: A cause of unexplained unilateral leg edema. *Clin Case Rep* 2021, 9:e04315

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*Diagnosis: Unilateral leg edema (possible DVT)*