## Phlebologie



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## Dear readers,

Technical developments in medicine are increasing exponentially. Imaging allows us to scrutinise millimeter slices and pharmacology offers a spectrum of substances to optimise treatment. Progress in catheter techniques and endoluminal devices allow us to reach regions which, until recently, were only accessible via large surgical incisions.

Regarding the diagnosis and treatment of proximal deep vein thrombosis the last years have brought unbelievable progress. Starting with the observations of "Virchow's Triad" (calor, rubor, tumor) through to contrast phlebography and duplex ultrasound and recently intraluminal ultrasound. Now the finest tomography images are possible with outstanding resolution. These diagnostic advances are paralleled by compression device developments, textile modifications of compression stockings and an explosion of new oral anticoagulants.

Long-term studies published today are based on diagnostic and therapeutic methods from years ago. Therefore, it is not clear, whether the procedures applied today are helpful in the long run. We will know this only in the future. Furthermore, the more sophisticated an intervention, the more lucrative it usually becomes. This brings doctors into conflicts of interest and of conscience. This is true especially in health care systems where the hospital or the office is run as a business with personal responsibility for the salaries and expenses.

The question that should always be kept in mind is whether any new treatment is of benefit to the patient. For example, in the post-thrombotic syndrome (PTS), does the introduction of a venous stent confer any advantage to the patient over treatment with compression stockings? We know already that stents are for life and there is a complication rate. This includes thrombosis, in-stent restenosis and the high likelihood of anticoagulation for many years, even for life.

Reliable criteria are required to predict which patients would benefit from an intervention and which not. It is not enough to rely on clinical assessment and imaging alone because of the multifactorial nature of symptoms in PTS and the multidisciplinary nature of leg pain, including reflux disease. Furthermore, calibre reductions of more than 50% diameter of the left iliac vein are found in 24% of the healthy population. In consequence, there is a great risk of over diagnosis and over treatment.

Finally, there is always the temptation to optimize income using an intervention when deciding on a case with unclear indications. Expressed the other way round, are we acting on top of a wave of good marketing when we use expensive medical devices by trusting their promise of benefit which would not withstand deeper scrutiny?

All these considerations have motivated me to step into the discussions about the increasing numbers of stents placements by asking pertinent questions. I had the honour to moderate a session on this topic at our last German Society Congress of Phlebology (2018). This session set the basis for this issue. I personally do not offer specific treatment for iliac vein thrombosis and in this way, I remain neutral. However, I would like to

thank the colleagues that followed my invitation and provided evidence. They have drawn an overview from diagnostics to therapy and the consequences of our treatment regarding the post thrombotic syndrome. From the point of view of an examiner that specialises in assessment and diagnosis I want to pledge for the use of an objective, reproducible method to quantify venous disease that could be applied before and after any invasive treatment of the (deep) venous system. This is why we have demonstrated the possibilities of air plethysmography to full the diagnostic gap by providing haemodynamic measurements which can be applied easily before any decision making.

It remains the skill of the doctor to find the best way **for** the patient and together **with** the patient through a confusing number of new and different technologies.

This issue of Phlebologie has been written to help us meet these challenges.

Yours Erika Mendoza Wunstorf