



Podcast Dr. Karetova - Part 2

In this podcast, we'll speak of Acute Complications of Chronic Venous Disease with focus on Superficial vein thrombosis and deep vein thrombosis

Today we are here with

Dr. Debora Karetová,

MD, Associated Professor of Medicine at Charles University in Prague, Outpatient Department Head at Second Department of Internal Medicine, Charles University in Prague, and she is the president of the Czech Angiology Society.

Goodmorning Dr. Karetová

DR.

Good morning.

When are interventional or surgical treatments more appropriate?

In various stages of the CVD, we have also to think about interventional approach, because this is the only which leads to elimination of the varicose veins, and then really it's a key of the problem.

In particular, it's about preventing disease progression. We have many different approaches like sclerotherapy, based on the use of different chemical agents to ablate veins, venules, and the other one is classical surgery.

And before introduction of nowadays modern, very popular endovenous thermal and chemical ablation interventions, surgery was considered the gold standard for the treatment of chronic venous insufficiency for a long time.

We know that open varicose vein surgery is still a valid method, but it is not so popular because it is bringing some sort of potential complications.

And nowadays, the surgical approach is usually reserved to patients with large, extremely large varices.

And we have other two different approaches, endovenous thermal ablation, laser one, and radiofrequency

and both these techniques are based on the induction of controlled thermal injury. These both techniques and also some mechanochemical and others have replaced surgical intervention, classical one, because it offers similar results with less convalescence and a very low rate of complications.

So we have to combine all methods and explain the patient in which phase we need to use each of them.

And at the last, to summarize all these methods, I think that it's necessary to choose for each patient the optimal therapeutic approach, but for all of them, usually is used lifestyle modification and pharmacological therapy.

To sum up, what are the main long term complications of the disease?

Chronic venous insufficiency can lead to a range of complications if left untreated. These include development of venous ulcers, occurrence of superficial or even deep vein thrombosis, and secondary lymphedema, and in cases with extremely pronounced venous hypertension, bleeding from prominent varices could occur.

It's important to know the pathophysiology of venous ulcers because it is coming from chronic venous

insufficiency, which leads to skin breakdown and ulcer formation, typically in the gaiter region of the leg, above the ankle, especially medially.

So at the beginning is the unresolved valve incompetence due to valvular degeneration or post-thrombotic syndrome, with resultant retrograde reflux with pooling of blood.

Then sustained venous hypertension transmits to venules and capillaries, which delays the subsequent endothelial activation and dysfunction.

And also increased capillary permeability is a problem because there is a leakage of plasma proteins or red blood cells and inflammatory cells and we can also on the histopathological picture see fibrin formation and development of edema and destruction of the endothelium.

So, together with leukocyte activation and degradation of extracellular matrix, everything is worsening the tissue composition.

And also, such inflammation leads to fibrosis, skin induration. So, we have to fight against microvascular thrombosis, endothelial dysfunction, leukocyte activation, and resulting impaired oxygen diffusion.

And advanced stages are, in these cases, characterized by following situations like prominent skin changes in the form of lipodermatosclerosis, stasis dermatitis, atrophied leg, and even then chronic venous ulceration

Many times the problem is also in repeated superficial thrombophlebitis, this thrombosis of superficial vein, the problem of permanent edema together with secondary lymphedema, and also in some cases ankle joint stiffness from chronic scarring.

So chronic venous insufficiency, it's not a benign disorder and carries enormous morbidity. Without correction, the condition is progressive.

And because it's up to 5% of patients with CVD is suffering from it, So, this is necessary to be very, not aggressive in the treatment, but active, and also fight with the problem because the patients are suffering from pain, and even with treatment, recurrences of all these situations like venous ulcers are common.

So we have to care in complex of the patients and try to improve their quality of life.

Thank you so much Dr. Karetova we really appreciate your contribution

Thank you very much it was a pleasure for me as well

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