

ESTIMATION OF THE COLLATERAL CIRCULATION INDEX /C.C.I./ IN
THE LOWER EXTREMITIES

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The difference between the blood volume flow in femoral segment and femoral artery measured by means of pulse Doppler and tetrapolar rheography can be used as an index of the collateral circulation /C.C.I./. The value of the C.C.I. depends on the degree of the occlusion.

The preliminary studies were carried out in 32 healthy subjects and 30 patients with occluded arteries in the lower extremities.

In healthy volunteers the C.C.I. was equal to 0.33.

In patients with aorto-iliac occlusion C.C.I. has increased to 0.55, in multi segmental occlusion to 0.58 and in femoral-popliteal occlusion up to 0.70 respectively.

After the reconstructive surgery the C.C.I. approaches again the value of 0.3 - 0.4 as in the healthy subjects.

In patients with the post operation complications followed by the occlusion of the reconstructed vascular bed the C.C.I. increases again.