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[Vagal stimulation - a new possibility for conservative treatment of peripheral arterial occlusion disease].

[Article in German]

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BACKGROUND: The options for the conservative therapy of PAD, and also the achievable benefits are well documented in the S3-guidelines and the TASC-II guidelines. Upon vagal stimulation with a P-STIM device a significant extension of the pain-free and maximum walking distance could be noticed. As this fact continued beyond the end of the therapy, we may have found a new, conservative therapy option to manage PAD.

PATIENTS AND METHODS: In a prospective single centre study we reviewed 31 patients with PAD (Fontaine stages II and III) who were treated by vagal stimulation with a P-STIM device. The following parameters were analysed: indication, duration of therapy, improvement of pain-free walking distance after therapy and complications.

RESULTS: 31 patients received a vagal stimulation therapy for intermittent claudication in Fontaine stages II (97 %) and III (3 %). The duration of treatment averaged 6 weeks (minimum 2 weeks, maximum 9 weeks). 27 out of 30 patients were able to increase their pain-free walking distance up to a hundred-fold of the initial values. 3 patients could not give any information about increasing their walking distance in meters, but they reported about an obvious amelioration. All patients reported a continuing improvement after 4 weeks and after further 12 weeks, partly even about additional enhancement. Just 1 patient could not improve his walking-distance -after 3 periods of therapy. This was the only -patient with an isolated diabetic microangiopathy without stenosis or occlusions in the large vessels.

CONCLUSION: The considerable increase in pain-free walking distance after vagal stimulation therapy by P-STIM is appreciably better than those which were described for supervised exercise therapy or pharmacotherapy with Naftidrofuryl or Cilostazol. On the basis of these results we think that vagal stimulation by P-STIM might be a new option for treating intermittent claudication.

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