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Pitavaendothelial function and delays the progress of atherosclerosis in patients with hypercholesterolemiastatin calcium improves

Key words: Flow-mediated vasodilatation (FMD), Hypercholesterolemia (HC), Pitavastatin calcium, Carotid intima-media thickness (IMT),

Research Summary

This article mainly focused on the effects of pitavastatin calcium on reversing cartiod atherosclerosis associated with hypercholesterolemia(HC), and summarized the favorable effects pitavastatin calcium had in the following aspects:

⑴ In the patients with HC, significant alterations to peripheral arteries include thickened IMT, distended vessel diameter, reduced FMD and augmented stiffness;
⑵ Without regard to the other cardiovascualr risk factors, high cholesterol levels are independent risk factors for the imparied endothelial function and structure of the arteries; As togethering with other risk factors, all of them can significant effect on functions of peripheral vascular, however, no significant effect on structure, suggesting the synergistic effect;
⑶ Endothelial function is obviously improved by pitavastatin calcium treatment in patients with hypercholesterolemia, which is closely related with the reduced stiffness and prohibited IMT.

Innovation points

●For the first time we found that in patients with HC pitavastatin calcium treatment can improve the endothelial function of brachial artery and carotid artery and delay the progress of atherosclerosis .

●For the first time we confirmed that endothelial function is obviously improved by pitavastatin calcium treatment in patients with HC, which is closely related with delaying the progress of atherosclerosis .

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Innovation points

A series of comprehensive tables were generated to summarize the favorable effects about pitavastatin calcium.

Figure 1 | Influences of dose-dependent pitavastatincalcium in IMT.

Table 1 | Clinical characteristics, hematologic profile and ultrasound indexes of the studied population.

Table 2 | Correlations between β, IMT and the Factors.

Table 3 | Relationship between FMD, β, IMT and the Factors.

Table 4 | Analysis of covariance (ANCOVA).

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