common carotid artery (CCA) corresponding to the human middle cerebral artery (MCA), and the other stent was implanted into the superficial cervical artery (SCA) corresponding to the human CCA. Image analysis using angiography (DSA) and intravascular ultrasonography (IVUS) were performed. Histological findings including inflammatory changes around the stent struts after MSC administration were evaluated. The inventors confirmed that MSCs can also be administered to a patient subjected to stenting, and the progress of neointimal hyperplasia could, moreover, be suppressed in the CCA and the SCA subjected to stenting thereby.

[0008a]

In one aspect, the present disclosure refers to a use of a composition in the manufacture of a medicament for preventing in-stent restenosis, wherein the composition comprises mesenchymal stem cells, wherein the medicament is to be administered to a patient subjected to stenting, wherein 10^7 or more mesenchymal stem cells per dose are to be intravenously administered.

[0009]

Claims

[Claim 1]

Use of a composition in the manufacture of a medicament for preventing in-stent restenosis, wherein the composition comprises mesenchymal stem cells, wherein the medicament is to be administered to a patient subjected to stenting, wherein 10^7 or more mesenchymal stem cells per dose are to be intravenously administered.

[Claim 2]

The use according to claim 1, wherein the patient is a patient who suffers from or has suffered from any disease selected from atherosclerosis, ischemic heart diseases including myocardial infarction, ischemic cerebrovascular diseases including cerebral infarction and transient ischemic attack (TIA), arteriosclerosis obliterans (ASO), Buerger's disease, arteriosclerotic lesions in blood vessels of the whole body, dissecting lesions of vascular system including a dissecting aneurysm, and an aneurysm.

[Claim 3]

The use according to claim 1 or 2, wherein the stenting is carotid artery stenting (CAS) or percutaneous transluminal angioplasty and stenting (PTAS).

[Claim 4]

The use according to any one of claims 1 to 3, wherein 5×10^7 or more cells per dose are to be administered.

[Claim 5]

The use according to any one of claims 1 to 4, wherein the mesenchymal stem cells are mesenchymal stem cells derived from bone marrow or blood.

[Claim 6]

The use according to any one of claims 1 to 5, wherein the mesenchymal stem cells are mesenchymal stem cells derived from bone marrow or blood of the patient.