An object of the present invention is to provide a new method for treating cerebral hemorrhage associated with a reperfusion therapy for vessel occlusion and, in particular, to provide means for reducing risk of cerebral hemorrhage associated with thrombolytic therapy and treating motor dysfunction and higher brain dysfunction associated with an ischemic vascular disorder.

Solution to Problem

[0008]

The inventors have found that by intravenously administering MSCs, in combination with thrombolytic therapy with rt-PA, to a transient middle cerebral artery occlusion model that has been induced by inserting an intraluminal suture into the artery, hemorrhagic infarction is suppressed markedly and significant improvement of motor function over time is exhibited.
In one aspect, the present invention refers to the use of mesenchymal stem cells in the manufacture of a medicament for treating an ischemic vascular disorder, wherein the medicament is to be used in combination with a reperfusion therapy for vessel occlusion.
In another aspect, the present invention refers to the use of mesenchymal stem cells in the manufacture of a medicament for preventing cerebral hemorrhage associated with a reperfusion therapy for vessel occlusion.

[0009]

Accordingly, the present disclosure relates to the following (1) to (18).

(1) A medicament for treating an ischemic vascular disorder, comprising mesenchymal stem cells, wherein the medicament is used in combination with a reperfusion therapy for vessel occlusion;

(2) the medicament according to (1) above, wherein the medicament reduces risk of cerebral hemorrhage associated with the reperfusion therapy for vessel occlusion;

Claims

[Claim 1]

Use of mesenchymal stem cells in the manufacture of a medicament for treating an ischemic vascular disorder, wherein the medicament is to be used in combination with a reperfusion therapy for vessel occlusion.

[Claim 2]

The use according to claim 1, wherein the medicament reduces risk of cerebral hemorrhage associated with the reperfusion therapy for vessel occlusion.

[Claim 3]

The use according to claim 1 or 2, wherein the reperfusion therapy for vessel occlusion comprises any one or more selected from administration of a thrombolytic agent, a platelet aggregation inhibitor, and an anticoagulant agent, and physical removal of a blood clot.

[Claim 4]

The use according to any one of claims 1 to 3, wherein the reperfusion therapy for vessel occlusion comprises administration of the thrombolytic agent.

[Claim 5]

The use according to claim 4, wherein the thrombolytic agent is plasminogen activator.

[Claim 6]

The use according to any one of claims 3 to 5, wherein the medicament extends a time window in which the thrombolytic agent can be administered.

[Claim 7]

The use according to any one of claims 1 to 6, wherein the ischemic vascular disorder is an ischemic cerebrovascular disorder or myocardial infarction.

[Claim 8]

The use according to any one of claims 1 to 6, wherein the ischemic vascular disorder is a super acute phase or acute phase of an ischemic cerebrovascular disorder or acute myocardial infarction.

[Claim 9]

The use according to any one of claims 1 to 8, wherein the mesenchymal stem cells are mesenchymal stem cells derived from bone marrow.

[Claim 10]

Use of mesenchymal stem cells in the manufacture of a medicament for preventing cerebral hemorrhage associated with a reperfusion therapy for vessel occlusion.

[Claim 11]

The use according to claim 10, wherein the reperfusion therapy for vessel occlusion comprises any one or more selected from administration of a thrombolytic agent, a platelet aggregation inhibitor, and

an anticoagulant agent, and physical removal of a blood clot.

[Claim 12]

The use according to claim 10 or 11, wherein the reperfusion therapy for vessel occlusion comprises administration of the thrombolytic agent.

[Claim 13]

The use according to claim 12, wherein the thrombolytic agent is plasminogen activator.

[Claim 14]

The use according to any one of claims 11 to 13, wherein the medicament extends a time window in which the thrombolytic agent can be administered.

[Claim 15]

The use according to any one of claims 10 to 14, wherein the medicament is to be used for a patient with an ischemic vascular disorder.

[Claim 16]

The use according to claim 15, wherein the ischemic vascular disorder is an ischemic cerebrovascular disorder or myocardial infarction.

[Claim 17]

The use according to claim 15 or 16, wherein the ischemic vascular disorder is a super acute phase or acute phase of an ischemic cerebrovascular disorder or acute myocardial infarction.

[Claim 18]

The use according to any one of claims 10 to 17, wherein the mesenchymal stem cells are mesenchymal stem cells derived from bone marrow.