

Fundamental Study on Assessment of Neurotransplantation Using Nuclear Medicine Imaging

メタデータ	言語: jpn 出版者: 公開日: 2022-04-14 キーワード (Ja): キーワード (En): 作成者: Mori, Hirofumi メールアドレス: 所属:
URL	https://doi.org/10.24517/00056878

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 International License.



1997 Fiscal Year Final Research Report Summary

Fundamental Study on Assessment of Neurotransplantation Using Nuclear Medicine Imaging

Research Project

Project/Area Number

08671011

Research Category

Grant-in-Aid for Scientific Research (C)

Allocation Type

Single-year Grants

Section

一般

Research Field

Radiation science

Research Institution

KANAZAWA UNIVERSITY

Principal Investigator

MORI Hirofumi Kanazawa University, Radioisotope Center, Professor, アイソトープ総合センター, 教授 (90019604)

Co-Investigator(Kenkyū-buntansha)

TSJI Siro Kanazawa University, School of Medicine, Associate Professor, 医学部, 助教授 (70227388)

SHIBA Kazuhiro Kanazawa University, Radioisotope Center, Assistant, アイソトープ総合センター, 助手 (40143929)

Project Period (FY)

1996 – 1997

Keywords

Alzheimer's disease / Lesion of Nucleus Basalis Magnocellularis / Acetylcholine / Receptor / Neurotransplantation / Transporter

Research Abstract

Alzheimer's disease is one of most troublesome problems encountered in the elderly population. One proposed hypothesis is that a deficit in cholinergic neurotransmission in Alzheimer's disease underlies this serious symptom of the disease. Cholinergic denervation rat model by producing an unilateral lesion of nuleus basalis magnocellularis (NBM) are reported to a model of cognitive deficits, one of instructive models of Alzheimer's disease (AD). The neurotransplantation is now promising as an effective strategy for functional repair in a variety of neural systems in disorders such as Parkinson's disease. In this study autotransplantation of vagal ganglion was performed to NBM lesioned rats. The effects of cholinergic grafts on cholinergic systems evaluated by autoradiographic images in duration of 1,2 and 4 weeks after surgery. Cerebral blood flow (CBF), muscarinic acetylcholine receptor (mAChR), m1 and m2 subtype of AChR-mRNA images were obtained using 99mTc-hexamethyl-propyleneamine ...▼ More

Research Products (4 results)

AllOther

AllPublications (4 results)

[Publications] Shiba K: "In vitro characterization of radioiodinated (-) m-Iodovesamicol in rat cerebral membranes" Life Sciences. 59 · 13. 1039-1045 (1996)

▼

[Publications] Kuji I: "Disdrepancy between blood flow and muscarinic receptor distribution in rat brain after middle cerebral occlusion" Eur J Nuclear Medicine. 24 · 6. 665-669 (1997)

▼

[Publications] Shiba, K.: "In vitro characterization of radioiodinated (-) m-Iodovesamicol in rat cerebral membranes." Life Sciences. 59 (13). 1039-1045 (1996)

▼

[Publications] Kuji, I.: "Disdrepancy between blood flow and nuscarinic receptor distribution in rat brain after middle cerebral occlusion." Eur J Nuclear Medicine. 24 (6). 665-669 (1997)

▼

URL: https://kaken.nii.ac.jp/report/KAKENHI-PROJECT-08671011/086710111997kenkyu_seika_hokoku_

Published: 1999-03-15