Conclusions: This case report indicates a relation between persistent memory impairment, navigation problems, and hippocampal damage after sporadic ecstasy use.

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FRIDAY AFTERNOON, JULY 12, 2013

Invited Address: Functional Heterogeneity for Memory of the Medial Temporal Lobes and their Connections

Presenter: Andrew Mayes

12:00–1:30 p.m.

A. Mayes. Functional Heterogeneity for Memory of the Medial Temporal Lobes and their Connections.

Organic amnesia typically involves impaired recall and recognition of both pre- and post-mortemly encountered facts and experiences. It is caused by lesions to the medial temporal lobes (MTL) or of structures, such as parts of the midline diencephalon, basal forebrain, or retrosplenial cortex, with which the different parts of the MTL have extensive structural connections. The impaired memory functions depend on many processes, but disagreement still persists about which of them are disrupted in amnesia and which impaired processes are mediated by which MTL and other amnesia-related structures. In particular, dispute continues about whether different structures in the MTL help mediate recall- and familiarity-based memory. Although strongly connected, the cytoarchitecture of the palaeocortical hippocampus differs considerably from that of the neocortical perirhinal and parahippocampal cortices so it probably processes its inputs differently from the other two structures and there is evidence that all three receive different inputs. While there appears to be no additional loss of material during extended consolidation periods that contain sleep, ecstasy-polydrug users demonstrated a decrease in overnight consolidation accuracy relative to short-term memory accuracy, a finding that was not observed in non-drug using controls. This research highlights the importance of employing accuracy measures when assessing memory in ecstasy-polydrug users.

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FRIDAY AFTERNOON, JULY 12, 2013

Paper Session 6: Oncology

12:00–1:30 p.m.


Objective: Patients with a malignant brain tumor (e.g. glioma) are not only confronted with the diagnosis and treatment of cancer, but also with changes in cognitive and neurological functioning that can profoundly affect their daily lives. We aim to explore the associations between cognitive functioning and health-related quality of life (HRQOL) of both low-grade and high-grade glioma (LGG and HGG) patients.

Participants and Methods: Patients and healthy matched controls underwent neuropsychological testing and completed self-report measures.