Splenium glioma

The syndrome of interhemispheric disconnexion has been systematically researched in 10 cases of medial and posterior callosal tumours. The cases have been documented with CT Scann and two of them were anatomically verified. Two had a complete disconnexion syndrome; another, whose lesion was situated on the forceps major, had no sign of disconnexion. In the others, the semiology was proportional to the extent of the tumour, sometimes minimal and in this case, only corresponding to an extinction of the left ear in the dichotic test, which therefore appeared in our series as the most constant sign of a transfer-trouble. Among the other signs, left tactile anomia was found in two patients, left ideomotor apraxia in three, left visual anomia in five. Seven patients had a right constructional apraxia, which was bilateral in five of them. Left agraphia was noted in five patients, among which three had also a right hand dysgraphia, whose physiopathology is discussed. Tactile alexia was noted in three patients, two had a trouble of somesthesic information's transfer, one had a pure alexia (left occipital lesion plus splenium). Signs of hemispheric independence were uncommon: one patient presented a “foreign-hand sign” [1].

Case reports

Osawa et al. reported two patients with tumours arising from the splenium of the corpus callosum that caused a memory disturbance consistent with retrosplenial amnesia as well as a variety of cognitive deficits including agraphia, acalculia, constructional apraxia and ideomotor and ideational apraxia involving both hands, but not aphasia. Patients showed disorientation to time and place, impaired recent memory and memorizing capacity; immediate and remote memory were preserved. Despite impaired performance intelligence quotients (IQ), verbal IQ was relatively spared. Patients also showed disconnection symptoms including bilateral crossed visuomotor ataxia and alexia to stimuli presented in the right visual field. In both cases, the tumour of the splenium had provoked surrounding oedema extending to the left parietal and occipital lobes [2].

Assencio-Ferreira et al. reported on a seven years-old boy with complex partial seizures and the presence of low-grade glioma in left fronto-parietal region. The magnetic resonance imaging showed focal non-hemorrhagic lesion in the splenium of the corpus callosum. The description of the transient lesion in the splenium of the corpus callosum was related in three previous studies, in patients with epilepsy. Thus, the observed transient focal lesion in the splenium of the corpus callosum of this child, probably, has correlation with to prolonged focal partial seizures and not to the presence of glioma low grade [3].

A patient with a severe amnesic syndrome following a glioma of the splenium of the corpus callosum is reported. The long-term memory deficit involved anterograde as well as retrograde events dating back to 40 years and causing topographical disorientation. Short-term memory test performance was in the normal range, with the exception of tactile memory which was severely impaired.The patient also showed disconnection symptoms, due to severing of occipito-parietal and parieto-temporal connections, while parieto-parietal connections were undamaged [4]

Unclassified

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