Oral MO-10

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Disseminated Juvenile Pilocytic Astrocytoma in Childhood

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목적 : To evaluate the clinical characteristics and outcome of the patients with disseminated pilocytic astrocytoma compared to non-disseminated disease and to discuss treatment options for disseminated disease

대상 및 방법 : We identified patients with disseminated pilocytic astrocytoma from our Tumor Registry over 21 years of period and reviewed medical records and neuroimages to determine location of the tumor, pattern of dissemination, clinical characteristics, treatment, and outcome. 24 controls without dissemination, matched for age at diagnosis, tumor histology, and primary location were selected from the same registry and case/control comparison was done using Kaplan-Meier survival analysis.

결과 : 12 cases with pilocytic astrocytoma were identified to have a disseminated disease. Primary tumor sites werehypothalamus/chiasm in 8, cerebellum in 3, medulla/vermis in 1, and pineal region in 1 (One patient had tumors at two different sites). Two cerebellar tumors were gross totally resected. Subtotal/partial resection (n=8) or biopsy (n=3) was performed in the remaining tumors. Ten patients received postoperative chemotherapy and/or irradiation. Leptomenigeal dissemination present at initial diagnosis in two and from 2 to 99 months after diagnosis in 10. Diagnosis of spread was established by MR imaging (n=12) and histology was obtained in 7. Nine patients had either tumor or treatment-related symptoms and three were asymptomatic. Eight patients were treated with single or combinations of resection, irradiation, and chemotherapy for disseminated lesions. On follow-up images, 11 of 18 cranial and spinal metastatic lesions improved or remained stable and minimal progression was noted in remaining seven. Four of the 12 patients died over a mean follow up of 78 months since diagnosis of dissemination, compared to two of 24 controls over a similar period. Mean survival time of disseminated and control group was 161 +/-15 months [CI 130-191] and 183 +/-11 months [CI 161-205] each (p= 0.33).

결론 : Leptomeningeal dissemination of the pilocytic astrocytoma occurs most commonly in tumors those are located adjacent the CSF space that cannot be completely removed. Though the clinical course of disseminated tumors trended worse than those with non-disseminated tumor, the difference didn't reach statistical significance in this series. Treatment options should be considered carefully in each case, appreciating the potential indolent nature of the

tumor and the benefit versus toxic effects of the treatment, particularly in these young patients