Morbidity of stereotactic biopsy for intracranial lesions.

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Abstract
The safety of stereotactic biopsy (STB) was studied in this article. CT-guided STB (Brown-Roberts-Wells; BRW) was performed 58 times for 56 patients (male: 29, female: 27) at Hyogo Cancer Center between 1988 and 2007. The age distribution ranged from 15 to 83 (mean: 55) years old. Histological diagnoses were established for 58 samples, with 35 cases of glioma, eight of metastatic brain tumor, nine of malignant lymphoma and leukemia, two of germ cell tumor, two of abscess, one necrosis, and one case with normal tissue. There were 3 cases (5.2%) in which an intratumoral hemorrhage with neurological deficits was occurred. They were needed surgically removal and those histological pathology revealed glioma. Concerning location of biopsy, STB for basal ganglia (putamen or globus pallidus) and thalamus were caused complication of the intratumoral hematoma after biopsy. The review of the 575 cases indicates that glioma was the relative risk factor for morbidity associated with CT-guided STB (odds ratio 5.36). The overall morbidity rate was 6.4% (37/575). We considered that tumors of the basal ganglia (putamen or globus pallidus), thalamus and glioma were risk factors of morbidity for CT-guided STB.