grade 0 was 23 cases (33%), grade 1 was 18 cases (26%), grade 2 was 28 cases (41%). There were 16 deaths in grade 0 (69.6%), 10 deaths in grade 1 (55.6%), 15 deaths in grade 2 (53.5%). CONCLUSIONS: In this study, there was no statistically significant difference in the SWI or T2* postgroup. However, there was a tendency for many long-term survivors in the SWI or T2* -positive group.

MET-10
PRELIMINARY REPORT OF RADIOTHERAPY FOR BRAIN METASTASES FROM BREAST AND KIDNEY USING MASK SYSTEM OF LEKSELL GAMMA KNIFE ICON
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OBJECT: Leksell Gamma Knife Icon enables us to apply new methods of immobilization using mask fixation and the option of fractionated treatment. This provides exceptional accuracy and precision of radiosurgery, making it a possibility for many more disease types and many more patients to be treated.
METHODS: We retrospectively analyzed 97 patients (140 times) with brain metastases from breast (B group) and 26 patients (33 times) with brain metastases from kidney (K group) and who underwent Gamma Knife Icon using mask fixation between September 25th, 2017 and June 30th, 2020 at Rakusai Shimizu Hospital. Patients with small, newly diagnosed, and non-eloquent area tumors were treated in a single session. If the tumor volume was larger than 5.0 ml, recurrence, or the location was in an eloquent area, we applied a fractionated schedule. If the tumor number was large, we selected a multisession schedule. Median tumor number was three (1-64) in B-group and two (1-31) in K group. Median tumor size was 2.7 (0.01-58.8) ml in B group and 2.8 (0.02-123.5) ml in K group. We selected fractionated schedules as follows: 7.0 Gy x 5Fr (5-10 ml), 4.2Gy x 10Fr (10-20ml), 3.7Gy x 10Fr (20-30ml), 3.2Gy x 10Fr (30ml-). RESULTS: 32 (B) and 14 (K) cases were treated in a single session, 80 (B) and 17 (K) with fractionation, and 28 (B) and 2 (K) with multiple sessions. Median survival times after Icon treatment was 28.2 (B) and 15.5 (K) months. Local control rates were 89% (B) and 85% after 12-month Icon treatment. Qualitative survival rates were 91% (B) and 96% (K) after 12-month Icon treatment. There were no statistically differences between two groups.
CONCLUSIONS: Although these results are limited to short periods, survival rates, local control rates and qualitative survival rates were within the acceptable ranges.

OTHER BRAIN TUMORS (BT)
BT-09
ANHIDROSIS IN NEUROHYPOPHYSEAL GERMINOMA TREATED WITH CBDDCA AND VP-16
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INTRODUCTION: Acquired generalized anhidrosis (AGA) is the disease with non-congenital, non-segmented diffuse sweating dysfunction and is associated with neurological signs and dysautonomia except for anhidrosis. Here we have experienced 2 cases of AGA in the patient with neurohypophyseal germinoma after carboglin (CBDDCA) plus etoposide (VP-16) (CARE) therapy. Relationship of AGA to neurohypophyseal germinomas and their treatment is discussed. CASES: We experienced two young (26 y/o and 27 y/o) female neurohypophyseal germomas cases of anhidrosis. They received CARE as chemotherapy and whole ventricular irradiation. They showed heat retention 2 to 3 years after initial treatment without recovered germinoma. Because acetylcholine sweating test was negative and skin biopsy revealed normal sweat gland structure, the diagnosis of acquired idiopathic anhidrosis (AGA) was possible. Comprehensive physical examinations and functional neuroimaging studies were performed. DISCUSSION: AGA and germinoma are both rare diseases. So, the present 2 cases have similar clinical settings, that anhidrosis may not be idiopathic but secondary. Affected responsible site of anhidrosis in the present cases is thought to be acetylcholine receptor in the sweat cells. The present cases did not have any known disease with anhidrosis and did not receive any medication which cause anhidrosis written in the statement of the present cases. So, a detailed medical history was obtained from the patient posttreatment. Histological findings showed anhidrosis may be not idiopathic but secondary. We have to consider anhidrosis as a possible complication of chemotherapy. Our results indicate that BRAF V600E mutation-activated MAPK pathway suppressed LAT1 expression and cell viability in PLNTY cells. Collaborative efforts are necessary to elucidate the pathogenesis of anhidrosis in these cases.