

Radionuclide therapy of malignant pheochromocytoma with ^{131}I -MIBG

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Three patients with malignant pheochromocytoma were treated with intravenous infusion of ^{131}I -MIBG. The dose per therapy ranged from 2.33 to 4.03 GBq. The repeated therapies were performed at intervals of 6, 11, 10 and 13 months in the first patient, 17 and 11 months in the second patient and 9 months in the third patient. Lumbago disappeared but little objective improvement was achieved in the first patient. The second patient exhibited a gradual decrease in catecholamine values with no change in tumor size. Remarkable decreases in tumor size and catecholamine values were observed in the third patient. No side effect was observed in any patient. The radiation dose absorbed by the main tumor was the highest at the first therapy and decreased with the number of therapies: 42, 26, 19, x and 9.0 Gy in the first patient, 63, 20 and 8.8 Gy in the second patient, and 81 and 40 Gy in the third patient. This was due mainly to the decrease in % uptake by the tumor of the ^{131}I -MIBG dose administered. Therefore the increase in the dose of ^{131}I -MIBG administered at the first therapy and/or shorter interval therapies seems to be important to obtain more therapeutic effects on malignant pheochromocytoma.

Key words: ^{131}I -MIBG, malignant pheochromocytoma, radionuclide therapy