EUROPEAN ORGANIZATION FOR RESEARCH ON TREATMENT OF CANCER

THIRD NCI-EORTC SYMPOSIUM ON NEW DRUGS IN CANCER THERAPY

Institut Jules Bordet, Brussels, Belgium

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Chairmen : D. KISNER, M. ROZENCWEIG

PROGRAM AND ABSTRACTS

Meeting Site :
Auditorium C.G.E.R.
rue des Bolleux, 12

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PRELIMINARY REPORT ON ANTITUMOR ACTIVITY OF CIS DICHLORO-DIAMMINE PLATINUM IN METASTATIC BRAIN TUMORS. K. Kolaric, A. Roth, I. Jelicic, A. Matkovic, Central Institute for Tumors and Allied Diseases, 41000 Zagreb, Yugoslavia.

In spite of pharmacokinetic studies, which have shown that only Cis DDP traces were found in brain tissue, cytotoxic activity of this drug in primary brain tumors was recently reported. The purpose of our study was to examine whether Cis DDP has also antitumor properties in metastatic brain tumors. Twenty two consecutive untreated patients with brain metastases recorded by CAT scans or radionuclide scans plus neurological examinations underwent the treatment. Pathohistology of primaries has shown 6 bronchial, 7 breast, 1 gastric and 1 colorectal carcinoma, furthermore 4 melanomas, 1 soft tissue sarcoma, 1 hypernephroma and 1 carcinoma of suprarenal gland. Cis DDP was administered in the doses of 30mg/m2 body surface daily, 4 days. All the patients received at least 3 cycles and have been evaluated. Objective response (5 complete and 6 partial remissions) was observed in 11 out of 22 patients (response rate 50%). Five stable disease cases were also noted, however, in residual 6 patients, the disease in the brain progressed. Complete response (5+, 6+, 7+ months) was observed in 3 breast cancer patients, 1 (6 months) in lung cancer and 1 (7+ months) in melanoma. Six partial responses (lung, breast, melanoma) lasted 2-5 months. Antitumor activity of Cis DDP was also noted in extra-cerebral tumor lesions (breast, lung and melanoma patients). Toxicity was moderate but tolerable for the patients. The preliminary results of this study have shown that Cis DDP possesses antitumorigenic properties also in the patients with metastatic brain tumors, what was not proved till now.

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DIFFERENTIAL SUSCEPTIBILITY OF CANCER AND NORMAL DNA TEMPLATES ALLOWS THE DETECTION OF CARCINOGENS AND ANTI-CANCER DRUGS (ONCOTEST). M. Beljanski, L. le Goff and M.S. Beljanski, Laboratoire de Pharmacodynamie, Faculté de Pharmacie, 92290 Châtenay-Malabry, France.

Based on the differential template activity exhibited by DNA isolated from cancerous and healthy human or animal tissues, the Oncotest is an accurate and rapid assay for the screening of carcinogenic compounds. Thus, in the presence of all necessary components for radioactive DNA synthesis by DNA polymerase, carcinogenic compounds, antimitotic drugs (and miscellaneous compounds), at given concentrations strongly stimulate the synthesis of DNA isolated from different cancer tissues, but only slightly enhance that of DNA from healthy tissues. Those carcinogens which cannot be characterized as mutagens in the Salmonella assay system, behave as carcinogens in the Oncotest. Carcinogenic potential of steroids can be shown by using the DNA from steroid hormone target tissue. There exists a common molecular mechanism through which carcinogens stimulate cancer DNA in vitro synthesis. Cancer DNAs are destabilized and in the presence of carcinogenic substances there is further DNA strand separation which accounts for the enhanced DNA synthesis. A correlation between in vitro cancer DNA synthesis, DNA strand separation and in vivo multiplication of cancerous cells can be demonstrated. Our assay system allows to detect those substances which selectively inhibit cancer DNA synthesis without affecting, in an appreciably way, that of DNA from healthy tissues.