TIM RECEPTOR-MEDIATED ENDOCYTOSIS AND TOXICITY OF FIB75-RA IMMUNOTOXIN IN HUMAN TUMOUR CELLS

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The FIB75 mouse monoclonal antibody(IgG_2) against human non-lymphoid cell membrane antigen, was conjugated to the toxic fragment of Ricin lectin. The binding and intracellular fate of the hybrid molecule in human bladder carcinoma cells was studied by double immunolabelling and using electron microscopy. Although toxicity developed, a great majority of the molecules accumulated in the lysosomes after 24 hr. By post-treatment with the non-toxic part of Ricin (B chain), there was a great increase in the toxic effect and a significant change was observed in the intracellular traffic of the molecule. This *in situ* "reconstituted" immunotoxin molecule was intensively recycling from multivesicular bodies to the cell surface, and only a smaller amount of molecules accumulated in lysosomes. Based on these results there is direct connection between B chain post-treatment and the escape of the immunotoxin molecule from the lysosomal system. According to the observations described, there are recommendations to design new immunotoxins which will participate in membrane receptor mediated endocytosis.

TKÁ INTERACTION OF CIS-DIAMMINEDICHLOROPLATINUM (II) WITH PHOSPHATE CARRIER IN MITOCHONDRIA

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The effect of the anticancer drug *cis*-diamminedichloroplatinum (*cis*-DDP) on the transport of inorganic phosphate into mitochondria of Zajdela hepatoma was examined.

Cis-DDP inhibited swelling and respiration of mitochondria in phosphate containing media. By determining the binding of ^{14}C-NEM to the phosphate carrier in presence of *cis*-DDP, a direct interaction of the latter with the phosphate carrier was demonstrated.

The data indicate that in the cytostatic effect of *cis*-DDP the interference of the drug with energy transducing processes in mitochondria may be also involved.

TÓT TRANSLATION OF ONCOGENES IN LEUKAEMIAS AND LYMPHOMAS

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Different fresh human leukaemia and lymphoma cells were examined for expression of *myb*, *myc*, *src* and *ras* oncogenes. More than one oncogene was translationally active in all of the tumours examined. Transforming DNA was transfected into NIH 3T3 cells. Cooperation between *myb* and *ras* oncogenes was observed in some acute myeloid leukaemias. Similar interaction between *myb* and *src* as well as *myc* and *src* oncogenes seems to be probable in a few cases of chronic granulocytic leukaemia and lymphoma respectively.
