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CLINICAL EVALUATION OF SERUM TRANSFERRIN IN PATIENTS WITH HODGKIN'S DISEASE

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Serum transferrin (Tf) was studied in 129 stage III and IV patients with Hodgkin's disease. Patients were treated with combined chemotherapy. Tf was determined by a radialimmunodiffusion technique before and after treatment and later at the time of control examination.

The aim of the present report was to determine whether there is a significant correlation of Tf with the stage, A and B symptoms, sex, histological subtype and effect of treatment.

The clinical activity was characterized in stage III and especially in stage IV by decrease of Tf. Significant correlation was seen in relation to histological sub-type. Patients with lymphocytic depletion showed significantly decreased Tf levels compared to patients with mixed cellularity and nodular sclerosis. Successful chemotherapic treatment resulting in complete remission was associated with increased Tf levels. In progression, a decrease or no change of transferrin was observed.

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CHOLESTERYL 14-METHYLHEXADECANOATE MODULATES PROTEIN SYNTHESIS AND PROTEIN PHOSPHORYLATION IN ZAJDELA RAT HEPATOMA

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A fractionated subcellular system isolated from the post-mitochondrial supernatant of Zajdela hepatoma cells and catalyzing the translation of specific exogenous mRNAs contains, besides all protein factors required for protein synthesis, ATP- and GTP-dependent protein kinases. These enzymes phosphorylate several proteins the pattern of which differs if (^{32}P)ATP or GTP is used as the substrate. Cholesteryl 14-methylhexadecanoate represents more than 80% of lipids extracted from the system by organic solvents. The removal of this ester from the subcellular preparation by immobilized cholesterol esterase results in changes of the pattern of phosphorylated and non-phosphorylated proteins and in a strong inhibition of protein kinase activity as well as of peptide chain formation. The presence of cholesteryl 14-methylhexadecanoate is thus apparently absolutely necessary for the normal function of the system and a close relationship between protein kinase activity and protein synthesis exists in Zajdela rat hepatoma.

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INVESTIGATION OF THE GENOMIC STRUCTURE OF TYPE D RETROVIRUSES

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Type D retroviruses isolated both from Old World monkeys (MPMV, LV), New World monkeys (SMRV) and permanent human cell lines (PMFV, HEp-2V, HeLaV) were included in a comparative study. Using the method of pactamycin mapping, the translational orders were determined for the gag gene-coded proteins of SMRV, MPMV and PMFV. The tryptic peptide analyses were performed on the major internal structural proteins. The p25 peptide maps of MPMV, LV, PMFV and Hep-2V were very similar but showed a striking dissimilarity to the P25 map of HeLaV and the p35 map of SMRV.

N-terminal amino acid analyses of internal structural proteins of MPMV and PMFV revealed identity for the p10s, p12s,and p25s, respectively. By use of a molecularly cloned DNA of a type D retrovirus (D 398), a preliminary restriction endonuclease map was established from circular unintegrated DNA (cccDNA) of PMFV. The comparison of restriction sites of PMFV cccDNA showed seven out of nine and three out of nine corresponding sites to the cccDNA of D 398 virus and MPMV, respectively.
