antigens, actin) was observed when comparing fresh and cultured cells. Lumenal epithelia and myoepithelia were clearly distinguishable by MAbs. The broad range anticytokeratin MAb A45-B/B3 has been used to detect metastases in regional lymph nodes from 22 breast carcinoma patients. Conventional histology and immunohistochemistry using A45-B/B3 showed a good agreement, but significantly more lymph nodes with metastases were detected by immunohistochemistry. This method seems to be superior in terms of sensitivity and reliability, and it may provide more confidence in diagnosing disease-free lymph nodes.

DOES THE EXPOSURE TO ENVIRONMENTAL FACTORS INFLUENCE THE DISTRIBUTION OF DIGESTIVE TRACT MALIGNANCIES?

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We have compared the incidence of gastrointestinal (GI) malignancies with selected environmental risk factors in a total of 109,000 people living in a defined selected region. The age distribution of the population is slightly progressive with prevailing industrial social structure.

Tumours of gastrointestinal system represent 25 to 36% of all malignancies. Their geographic distribution was modelled with the aid of a computer. The localities with high and low incidence of tumours were compared with the mean confidence interval and correlated with various environmental pollution factors.

The results of our study clearly demonstrate that some of environmental factors (water pollution, etc.) participate in the increased incidence of GI tumours.

THE FATE OF RSV SEQUENCES IN THE TRANSFORMED DUCK CELLS

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The long-term RSV passage in duck cells does not raise virus production in spite of viral genome integration even at the first pasage. However, after six tranfers the titre of virus sharply increased, the period of transformation was shortened and the transfecting activity of proviral DNA appeared. These alterations of RSV properties correlate with the changes in the nucleotide sequences of the viral genome. The td mutant deleted in v-src has been isolated from the pool of duck-adapted RSV. The transforming activity of the mutant recovered after inoculation in chickens. The new isolate of rASV is replication defective. The genome has only one unusual 4 kb EcoRI fragment. The provirus contains src-specific sequences and RSV-specific LTR but lacks of all replicative genes.

ONCOGENIC POTENTIAL OF A NOVEL HUMAN src-RELATED GENE, fyn

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We have isolated cDNAs representing the complete coding sequence of a new human gene which is a member of the src family of oncogenes. Nucleotide sequence analysis revealed that this gene, termed fyn, encoded a 537-residue protein which was 74% identical to the chicken oncogene product, p60c-src, over a stretch of 191 amino acids at its carboxy termus. In contrast, only 6% amino acid homology was observed within the amino-terminal 82 amino acid residues of these two proteins. It was possible to activate fyn as a transforming gene by substituting about two-thirds of the fyn coding sequence for an analogous region of the v-fgr onc gene present in Gardner-Rasheed feline sarcoma virus. The resulting hybrid protein molecule expressed in transformed cells demonstrated protein tyrosine kinase activity.

POLYADENYLATE POLYMERASE ACTIVITY IN SEVERAL CELL LINES

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The soluble poly(A)-polymerase content of growing and stationary cell populations from several (6) cell lines was determined. Cell populations from stationary cultures presented enzyme values with a mean of 31±12 units/mg of protein. The mean of values for growing cell populations was 62±18 units per mg of protein. A statistically significant difference was found between stationary and growing cell populations from the variety of cell lines examined. The observed differences in poly(A) polymerase levels