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CLINICAL EVALUATION OF FERRITIN IN UROLOGIC CANCER. A.Kido,A.Kuroda,M.Iio,H.Yamada,T.Machida,M.Miki,Y.Ohishi,M.Ueda and M.Yanagisawa. Tokyo Metropolitan Geriatric Hospital and Jikei University School of Medicine. Tokyo.

Serum ferritin was determined in 129 cases of urologic diseases and tissue homogenates of renal cell carcinomas and normal kidneys were also studied.

Serum ferritin was elevated in 25 out of 41 cases of renal cell carcinoma. Patients of high stages in these cases showed higher value. Ferritin levels of tissue homogenate in renal cell carcinoma were 4-8 times higher than that of the normal kidney.

Ferritin mixtures extracted from tissue were separated on disc electrophoresis at 5% polyacrylamide gels with 0.5M, pH 6.0 sodium phosphate buffer.

Ferritin mixture extracted from renal cell carcinoma revealed 4 bands of protein, first of which is supported to be ferritin. However, in extracted ferritin from normal kidney, second and third bands were not observed. It was suggested that ferritin mixture extracted from renal cell carcinomas showed heterogeneity.

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CARCINOEMBRINIC ANTIGEN(CEA) MONITORING OF PATIENTS TREATED WITH RADIATION THERAPY FOR VARIOUS MALIGNANT TUMORS. S.KOSUDA,Y.ANDO,Y.TAKAGI,H.MASAKI,K.LIAN,A.KUBO,T.DOKIYA,H.MIYAMOTO,S.HASHIMOTO. Department of Radiology,School of Medicine,Keio University, Tokyo.

We have measured CEA levels in one step sandwich method from October,1977. Plasma CEA levels in 546 various cancer patients (head & neck, breast, esophagus, uterine cervix, lung, urinary tract, brain etc.) treated with radiation therapy were measured before,during and after treatment,and they were followed for some months by CEA measurements. Few patients showed elevated CEA titers more than 2.5ng/ml prior to treatment(head & neck cancer 10.1%,breast cancer 35.8%,esophagus cancer 14.9%,uterine cervix cancer 31.0%,malignant lymphoma 7.4%,lung cancer 14.3%,urinary tract cancer 7.7%) Significant relationships between the CEA titers and tumor volume were not shown, especially head & neck cancer and malignant lymphoma.

Most of patients with recurrence or distant metastasis showed prominent elevated CEA titers but the decline of CEA titers by radiation treatment was not shown.

Elevation of CEA titers preceded recognition of recurrence or metastasis were shown by as much as three months in some patients with breast cancer,esophagus cancer lung cancer, and uterine cervix cancer.

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CEA VALUE INTO ORGANIZATIONS IN CANCER PATIENTS (SECOND REPORT).M.Satoh,T.Nomoto. Clinical Laboratory,National Yokosuka Hospital.Clinical Radiology,Tokyo Electric College.Yokosuka and Tokyo.

In a tumour and all kinds of cancer disease,it is thought that measurement of CEA value is very significance.But CEA is not necessarily always high value. Then,as we thought it is able to inquire chemically by all kinds of organizations,we examine CEA value of normality man and cancer patients. We do a part of all kinds of internal organs biopsy,and we did it use CEA RIAkit. By the above facts measurement of CEA value is all kinds of internal organs is possible,and in a classified density organization,we take value to bear out previous report as stomach plus lung,colorectomy are high value or liver,womb are low value. In indoor internal organs(stomach,bowels) compared with quality organization,there are a little mater of pick part and so on, but in hold of density abnormal change,it is enough,and in both pick and many are the possible case,we think that measurement of CEA value by a chemical analysis have a meaning.

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CLINICAL SIGNIFICANCE OF MEASURING CARCINOEMBRYONIC ANTIGEN(CEA) BY RADIOIMMUNOASSAY (4th. REPORT). --- CEA-LIKE SUBSTANCES OF DIGESTIVE JUICES IN PATIENTS WITH DIGESTIVE DISEASE ---. T. MURAI, Y. IIZUKA, M. MASAKI, R. KASUKAWA and M. SAITO. Second Department of Internal Medicine,Fukushima Medical College and Radioisotope Institute, Fukushima Medical College. Fukushima.

Amounts of CEA in digestive juices of 62 patients with digestive disease were measured by radioimmunoassay of Z-Gel method. In serial examinations of digestive juices; saliva, gastric juice, duodenal juice, bile and pancreatic juices, mean CEA levels were 79±114, 78±130, 143±197, 97±110 and 11±17ng/ml respectively. CEA levels in digestive juices were varies so greatly among individuals that clinical significance was considered hardly, except pancreatic juice, because of its lowest level and less variability. In saliva, a difference of CEA levels was observed between patients with Sjogren syndrome and others. In gastric juices, CEA levels were much higher in patients with chronic gastritis and gastric cancer than in patients with gastric ulcer, but though which was not significant statistically. Negative correlation was observed between CEA levels and free HCl concentrations in gastric juices. In bile, higher CEA levels were found in gallstone patients with clinical complaints than silent-stone patients. In pancreatic juices, CEA levels were higher in patients with pancreas cancer than patients with chronic pancreatitis.