

# EVALUATION OF CARCINOEMBRYONIC ANTIGEN (CEA) MEASUREMENT IN SURGICALLY-TREATED PATIENTS

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Measurement of serum CEA levels has been made in surgically-treated patients consisting of 129 malignant and 94 benign diseases over the past two years. Serum CEA levels showed significantly higher in patients with gastrointestinal cancer ( $4.93 \pm 0.69$  ng/ml) than those seen in the other diseases.

There was a close correlation between serum CEA levels and clinical stages in patients with gastric and colonic cancer, however, the result of CEA levels can not be considered as an useful screening test of early gastric and colonic cancer.

Twelve out of 15 patients with liver metastasis showed high CEA levels ( $8.61 \pm 2.32$  ng/ml). On the contrary, four out of 5 patients with hepatoma showed within normal CEA levels.

There exists a correlation between postoperative CEA levels and curative surgical treatment.

The relationship between preoperative serum CEA levels and histopathological findings in patients with gastric cancer was not evident, but CEA levels in patients with recurrent gastric cancer who suffered from poorly differentiated tumor showed high CEA levels.

It can therefore be concluded that the measurement of CEA levels in surgical point of view is of useful in patients with malignant gastrointestinal diseases.

# 48"HYDROTHORAX, ABDOMINAL DROPSY'S CEA LEVEL OF A PATIENT OF CANCER"

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(Purpose) RIAMethod step was discovered by Gold in 1965 and was developed by Thomson in 1969. Recently CEA-carcinoembryonic antigen spheres of a patient of cancer, an examination of hepatic function and a urinary disease etc.

Accordingly, we examined what CEA levels were indicated not only in serum and urine but also in another humors that is hydrothorax, ascites. (Subject&Process) Through 48 cases within patients diagnosed (from the 52th year to the 53th year of Showa) as a cancer's diagnosis in our equipments, took a subjective measurement of hydrothorax and ascites, making use of CEA (Dainabott&Co).

(Score) Normal level is 2.5ng/ml. CEA in serum indicated more than 5ng/ml in 41 cases. 32 case's ascites was more than 51ng/ml in these 41 cases. 26 cases was only ascites. 5 cases in 10 cases was under 5ng/ml by means of medical treatment.

(Results&Findings) 1) High level of ascites density which is accompanied by a cancer patient of abnormal level in serum is more clearly. 2) The case of the condition accompanied with ascites by a disease of cancer has high probability of abnormal level. 3) The density of serum and humors does not always coincide with each other. 4) In comparison with serum, humors raised late and also did a lowering after medical treatment of surgery.

From now on, we are going to investigate, including implantation case, from humors to tissue as the object of a vicious tumor patient.