

# EVALUATION OF DETERMINATION OF $\beta$ - THROMBOGLOBULIN BY RADIOIMMUNOASSAY

Yoshio Yonahara, Yoshiko Takahara, Yoshizo Sasaki, Kazuo Ishiyama and <sup>\*</sup>Ichiro Kuremitsu  
Nuclear Medicine, The 2nd Tokyo National Hospital, Tokyo.

<sup>\*</sup>Internal Medicine, The South Yokohama National Hospital, Yokohama.

We made an attempt to evaluated on quantitative determination of  $\beta$ - thromboglobulin ( $\beta$ - TG) in platelet poor plasma using  $\beta$ -TG RIA kit(Amersham) and obtained some findings as follows:

Results:I) For this assay, platelet poor plasma,processed so as to minimize platelet release during handling, must be used. The bloodsample cooled as rapidly as possible after withdrawal from the patient and centrifuge the sample at 1500g and 2-4 °c for 30 minutes.

2)The recovery of  $\beta$ -TG using platelet poor plasma added to various concentration of  $\beta$ -TG was 103,1- 110,8 %. The reproducibility of the -TG RIA kit were obtained 3,86, 3,92 and 1,82% on coefficient of variation.

3) -TG values: 7,0- 67,0(28,1+15,6)ng/ml for 16 normal persons, 21,0- 219,4(97,2+<sup>^</sup>46,8)ng/ml for 18 cerebral thrombosis patients, 7,4 -83,0(34,9+19,7)ng/ml for 21 non thrombotic patients.

4) Effects of Bencyclane fumatate to the cerebral thrombosis.

$\beta$ - TG levels of the cerebral thrombosis in therapy with Bencyclane fumatate was fluctuated.

# CLINICAL EVALUATION OF SERUM CEA LEVELS

Bunmei Kado\*, Tetsuo Nakajima\*, Tsuneko Tamai\*, Mizuyoshi Sakura\*, Yasuhito Sasaki\*\*, Teruo Nagai\*\*\*

\*Saitama Cancer Center, \*\*St.Marianna University School of Medicine and \*\*\*Gunma University School of Medicine.

Serum CEA levels were measured by RIA using one step sandwich method (Dinabot) in 1163 samples from 485 patients including 386 cases with malignant tumor, 94 non-malignant cases and 5 normal volunteers.

CEA levels were less than 2.5ng/ml in all normal volunteers. Positive CEA levels (>2.5ng/ml) were obtained in 39.9% of malignant and 10.6% of non-malignant cases.

High positive ratio was seen in colorectal (58.8%) and pulmonary cancer (54.3%). Positive ratio of CEA in gynecological and urological patients with cancer was relatively high (34%) as compared with previously reported in literatures.

Correlation between serum CEA levels and cell types of cancer was studied in patients with lung cancer. High positive ratio was observed in large cell carcinoma (75%), and adenocarcinoma (65%). Positive ratio in squamous cell carcinoma and small cell carcinoma was 45% and 25%, respectively.

CEA positivity in early gastric cancer was low (8%). Among advanced gastric cancer those with liver metastasis gave highest positive ratio of 88% in contrast to those without proven metastasis (23%). These appear to be a tendency that the larger the volume of hepatic metastasis, the higher the serum CEA levels. Primary hepatoma and cholangioma showed low CEA levels.

Comparison of pre- and post-operative CEA levels revealed high probability of recurrence or metastasis in patients with positive CEA levels at one week after operation.