

DOES THE NEW DR-70 IMMUNOASSAY DETECT DIFFERENTIATED THYROID CANCER? PRELIMINARY RESULTS OF AN ON-GOING STUDY

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Background/Purpose: To evaluate whether DR-70 immunoassay, a newly developed test, which quantifies fibrin degradation products in serum by a proprietary antibody and has high sensitivity and specificity in the diagnosis of colorectal, liver, gastric, lung, pancreas and ovary cancer, has a role as a detection assay for the presence of differentiated thyroid cancer.

Methods: We prospectively collected blood sera of 38 patients who underwent total thyroidectomy due to cancer, cancer suspicion or multinodular goiter. Sera was stored at -20⁰C and used for the DR-70 immunoassay, where a sandwich-type ELISA was carried out. According the pathological final results, patients were divided into 2 groups: benign (n=19) vs. malignant (n=19). Student's *t*-test was used for comparing means.

Results: The study group consisted of 26 women and 12 men, with a mean age of 52±11. There were no difference according demographics, between groups. Although Dr-70 reached a higher mean level in the cancer group (0.47±0.27 microg/mL vs. 0.60±0.38 microg/mL), this difference was insignificant (*p*>0.05). We were not able to calculate a cut-off level with these preliminary data.

Discussion & Conclusion: According preliminary results, Dr-70 immunoassay seems to going to have a promising role in differentiating thyroid cancer patients from benign controls. Whether it is going to become a promising useful test for the preoperative detection of differentiated thyroid cancer in clinical practice, we are awaiting the final results of the current study.