

USEFULNESS OF TC-99M TECHNETRIL AND TC-99M CARBOMEK IN THE DIAGNOSIS OF THYROID MEDULLAR CARCINOMA

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We studied 25 patients, 14 women and 11 men, with thyroid medullar carcinomas in 1995-2002. Distribution of patients depending of tumor process extension was as follows: II clinical stage - 7 (28%), III - 14 (56%), IV - 4 (16%). The sizes of tumor were ranged in diameter 0,9 to 6,5 sm. The regional metastasises were revealed in 21 cases, the distant metastasises in 4 cases. 22 patients were submitted to surgery, 3 patients underwent distant radiotherapy with the palliative purpose (total doze - 60 Gr).

According to cytological study the thyroid cancer was suspected of 11 cases, morphological local tumor relapses were confirmed in 9 cases. Among 5 radically treated patients malignant cells were not revealed in suspicious cervical lymph nodes.

10 patients underwent thyroid scintigraphy with Tc-99m Technetрил (analogue MIBI) and 13 patients with Tc-99m Carbomek (analogue Tc(V)-DMSA). One woman with relapse of thyroid medullar carcinoma in regional lymph nodes after radical surgical treatment and chemotherapy underwent thyroid scintigraphy with both Tc-99m Technetрил and Tc-99m Carbomek. In all studies false-positive results were not received.

In primary carcinoma cases, local focus uptake of Tc-99m Technetрил was found in 6 cases, besides tracer uptake was looked for also in the axilla in 1 case, in the regional lymph nodes and mediastinum – in 2 cases, and in the lungs and mediastinum – in 1 case. 1 false-negative result can be explained by small size of lesion (13 mm). Technetрил scintigraphic images in 2 cases with relapse of tumor showed focal uptake in the pectoral part of spine in one case and in the regional lymph nodes in second case.

We studied 3 patients after radical surgical treatment with Tc-99m Carbomek. Focal uptake in the regional lymph nodes and a liver was revealed in one case, in the neck lymph nodes – in second case, and in neck lymph nodes and cranium bones – in third. Maximal sizes of revealed neoplasms were ranged in diameter 20 to 50 mm. In primary patients, Carbomek scintigraphy was false-negative in 5 cases (the tumor sizes from 9 to 20 mm). During study of 5 patients without relapse of disease after combined treatment focal uptake of Tc-99m Carbomek was not revealed.

Conclusions: thyroid scintigraphy with Tc-99m Technetrit has high informative value for diagnosis of thyroid medullar carcinoma. Study with Tc-99m Carbomek is informative at patients with the tumor sizes more than 20 mm.