

# THYROID NEOPLASMS – CLASSICAL DIAGNOSTIC TECHNIQUES AND TUMOR MARKERS

## Summary

Thyroid tumors are a very common disorder and can occur in six percent of human population. Despite this fact, there are still no effective and reliable techniques that would allow to pose a reliable differential diagnosis between malignant and benign thyroid tumor. The prevailing diagnostic techniques are: ultrasonography, scintigraphy and fine needle aspiration cytology. In many cases they can not distinguish carcinomas from benign neoplasms. Such diagnosis is essential, because the patient with malignancy undergoes a very rigorous treatment that is unnecessary and inadvisable for patient with benign lesions. Therefore, the thyroid tumor markers are searched for. Generally tumor markers are substances, which presence or absence is related to ma-

lignancy. They can be used for population screening and for detection, diagnosis, staging, prognosis or follow up of malignant diseases. The thyroid tumor markers currently used have very restricted applications. The first one – calcitonine is produced only by one kind of cancer (medullary carcinoma) and the second – thyroglobulin is useful only in detection of recurrent follicular and papillary thyroid carcinoma. Therefore, there is a need to search for new tumor marker that could enable to differentiate benign lesions in thyroid from malignancies. This review article presents some information about thyroid neoplasms and methods of their diagnosis, highlighting current and possible usage of tumor markers.