

A Clinical and Morphological Rationale for Lateral Neck Lymph Node Dissections in Children and Adolescents with Papillary Thyroid Carcinoma

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Background: In Belarus with many papillary thyroid carcinoma (PTC) cases developed in patients because of the post-Chernobyl irradiation the need for prophylactic dissections of the central and lateral compartments of the neck is never questioned. As a result, we collected hundreds of PTC cases in children and adolescents that provide excellent information on the real initial extent of the disease, subsequent treatment and follow-up.

Aims: To identify factors associated with nodal disease (and the degree of their involvement) and to predict the risk of recurrent/persistent disease in this cohort of patients using clinical and morphological characteristics of the primary thyroid tumour and its lymph-node metastases in the central compartment of the neck.

Material and Methods: All the patients aged <19 years old at presentation with PTC who were treated with total thyroidectomy and lymph nodes dissections (in the central and lateral compartments of the neck) according to the extent of disease at the time of diagnosis (n = 509).

Results: The metastatic ratio index (MRI) was an independent variable that potentially influence the decision to carry out lateral lymph nodes compartment surgery in addition to routinely performed central lymph nodes dissection. A nomogram with excellent discriminatory ability and accuracy in predicting probability of ipsi or bi-lateral nodal disease was created. Clinical and pathological characteristics associated with relapse were identified.

Conclusion: The results of our study allowed us to supplement and refine the algorithms proposed by specialists of the American Thyroid Association.

Biography:

Dr. Mikhail Fridman works at the Minsk Municipal Clinical Hospital for Oncology, Republican Centre for Thyroid Tumors (2002- present) as the Head of the department of pathology. Successfully passed the exam in immunohistochemistry for mammary gland carcinoma under the auspices of NordiQC (2014), Degree Doctor of Medicine (oncology) was earned in the year 2015 for a research "Papillary thyroid cancer in children and adolescents: diagnosis, treatment, and prognosis". Took part in conferences under the auspices of European Thyroid Association, American Thyroid Association, International Academy of Digital Pathology, International Academy of Pathology and World Congress on thyroid Cancer in the form of abstracts, posters and oral presentations.