DOI: https://doi.org/10.4038/jdp.v18i2.7895 *Journal of Diagnostic Pathology 2023;18(2):24.*
Abstracts of Research Papers
Annual Academic Sessions 2023

Research paper 12

Lymphoid cell infiltrate and its association with coexistent pathologies in the thyroid gland

L. I. Madaluwage[1], L. Jayasinghe[2], T. P. M. Bopagoda[1], S. J. De. S. Hewavisenthi[1]

[1]*Department of Pathology, Faculty of Medicine, University of Kelaniya, Sri Lanka*
[2]*Military Hospital, Colombo, Sri Lanka*

Introduction and objectives: Lymphoid cell infiltrate (LTI) can co-exist with benign and malignant thyroid pathologies and their relationship with LTI is complex and is not completely understood. The objective of this study was to describe the significance of LTI and its relevance to co-existing pathologies.

Methodology : This was a descriptive cross-sectional study of all thyroidectomies reported from 2018 to 2022 at Faculty of Medicine, University of Kelaniya. Prevalence, severity of LTI and coexisting benign and malignant pathologies were assessed. The severity of LTI was graded according to number of lymphocytic foci based on criteria by Williams and Doniach, defined as grade 0-›0-1focus, Grade 1-›2-8 foci, Grade 2-›9-40 foci, Grade 3-›>40 foci, Grade 4-›more than half of parenchyma replaced by lymphocytic foci. Grades 0 and 1 were categorized as mild, grade 2 as moderate and grade 3 and 4 as severe LTI.

Results : Of the 203 cases examined, 128(63%) showed LTI of which 41/128(32.0%) was mild,43/128 (33.6%) moderate and 44/128(34.4%) severe. In cases with LTI, benign pathologies were seen in 81/128(63.4%) and malignant pathologies were seen in 47/128(36.7%) of which papillary thyroid carcinoma was the commonest(85.1%,40/47). In 75 cases without LTI, 53(70.6%) cases showed a benign pathology and 22(29.3%)cases were malignant. Severity of LTI in benign lesions was mild in 32/81(39.5%) moderate in 22/81(27.2%)and severe in 27/81,(33.3%) while in malignant lesions it was mild in 9/47(19.2%) moderate in 21/47(44.7%) and severe in 17/47(36.1%). A greater proportion of malignant lesions(47/69,68.12%)were associated with LTI than benign(81/134,60.4%), although there was no statistically significant difference.

Discussion and conclusion : Majority of malignant pathologies were associated with LTI of moderate to severe degree. In benign pathologies it was of mild degree. Though the presence or absence of LTI do not relate with an underlying pathology, the cautious assessment of thyroidectomies for a possible coexisting malignant pathology would be beneficial when moderate to severe LTI is encountered.

Keywords: lymphocytic thyroid infiltrates, severity, co-existing pathologies

Corresponding author: Dr Lakshika Madaluwage
Department of Pathology, Faculty of Medicine,
University of Kelaniya, Sri Lanka
imanilakshika@gmail.com