

## 제 12 차 대 만 두 경 부 중 앙 학 회

연 제 호 록

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### Thyocyte HLA-DR Expression in Variety of Thyroid Diseases

Du Hi Cho, Soo Sang Sohn,  
In Ho Kim, Ki Yong Chung,  
Joong Shin Kang and Eun Sook Chang\*

*Department of Surgery and Pathology\*  
Keimyung University School of Medicine  
Taegu, Korea*

Although normal thyroid epithelial cells do not constitutively express HLA-DR antigen, their expression is widely spread within thyroid glands obtained from humans with autoimmune thyroid disease and with many neoplastic thyroids. We have, therefore, studied immunohistochemically with regard to the expression of HLA-DR antigen of thyroidectomy specimens from 50 patients of various thyroid diseases with use of paraffin-embedded tissue. One or two sections from each case were stained with commercially available mouse monoclonal antibody for class II HLA-DR antigen (HLA-DR/Alpha, DAKO) and examined by semiquantitative counting system for thyrocytes, neoplastic thyrocytes and other cells expressing HLA-DR antigen.

All patients with lymphocytic thyroiditis (2/2) and diffuse hyperplasia (Graves disease) (5/5), most patients with Hashimoto's disease (9/11) expressed HLA-DR antigens in thyrocyte with abundant HLA-DR expressing lymphocytic infiltrates with lymph follicle formation in its vicinity or adjacent to the lesion.

Most patients with papillary carcinoma (9/11) had

HLA-DR antigen detected in malignant thyrocytes; while follicular carcinoma (0/3) and follicular adenoma (0/5) did not have detectable HLA-DR immunoreactivity. Adenomatous goiter (3/7) had HLA-DR antigen detected focally in lesser than half cases. Conversely, in four papillary carcinoma and three adenomatous goiter, HLA-DR expression of thyrocytes was found in the absence of HLA-DR expressing lymphoid infiltration. In such cases therefore other factors more than thyroid autoimmunity must be causative for HLA-DR immunoreactivity.

The results of this study indicate as follows.

- 1) The expression of HLA-DR on thyrocytes involved in autoimmune reactions appeared to be secondary to cytokine release from associated lymphocytic infiltrates.
- 2) Thyrocytes in thyroid lesions with equal degrees of lymphocytic infiltration without HLA-DR expression exhibited no HLA-DR immunoreactivity.
- 3) In neoplastic thyrocytes, most papillary carcinoma (9/11) exhibited detectable HLA-DR expression, while follicular carcinoma/adenoma (0/3/0/5) exhibited no detectable HLA-DR immunoreactivity which suggests the existence of divergent mechanisms inducing and modulating HLA-DR expression of different types of neoplastic thyrocytes.

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### 유두상 갑상선 암에서 AMES Score와 DNA배수성의 상관관계

연세대학교 의과대학 외과학교실

이종훈 · 최진섭 · 박정수