[PICTURES IN CLINICAL MEDICINE]

Thyrotoxicosis in Graves' Disease with Invasive Laryngeal Cancer

Hiroshi Nomoto^{1,2} and Mayuko Oita^{1,3}

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Picture 1.

A 53-year-old man diagnosed with advanced laryngeal cancer treated with radiotherapy was admitted to our facility because of general malaise and tachycardia. The thyroid gland was enlarged with induration; cervical computed tomography and sonography revealed that most of the thyroid gland had been replaced by invasive laryngeal carcinoma (Picture 1, 2). Laboratory data showed thyrotoxicosis (TSH

<0.05 μ U/mL, free T3 12.72 pg/mL, free T4 6.79 ng/dL) and high-titer TSH receptor antibody (7.6 IU/L). Such findings hampered distinguishing Graves' disease from destructive thyroiditis associated with invasive or metastatic cancer (1). Furthermore, TSH receptor antibody can be detected even after destructive thyroiditis (2). Technetium-99m pertechnetate scintigraphy was performed (Picture 3), and

¹Department of Internal Medicine, Tomakomai City Hospital, Japan, ²Department of Rheumatology, Endocrinology and Nephrology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Japan and ³Department of Medicine and Division of Diabetes and Endocrinology, Sapporo Medical Center, NTT East Corporation, Japan

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Correspondence to Dr. Hiroshi Nomoto, hnomoto@med.hokudai.ac.jp

Picture 2.

Total Uptake: 6.3%

Picture 3.

we ultimately diagnosed thyrotoxicosis in Graves' disease. We therefore propose that the radioactive iodine uptake be

carefully measured in order to distinguish between Graves' disease and destructive hyperthyroidism in cases of thyrotoxicosis with invasion of carcinoma involving the thyroid gland.

The authors state that they have no Conflict of Interest (COI).

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