

[PICTURES IN CLINICAL MEDICINE]

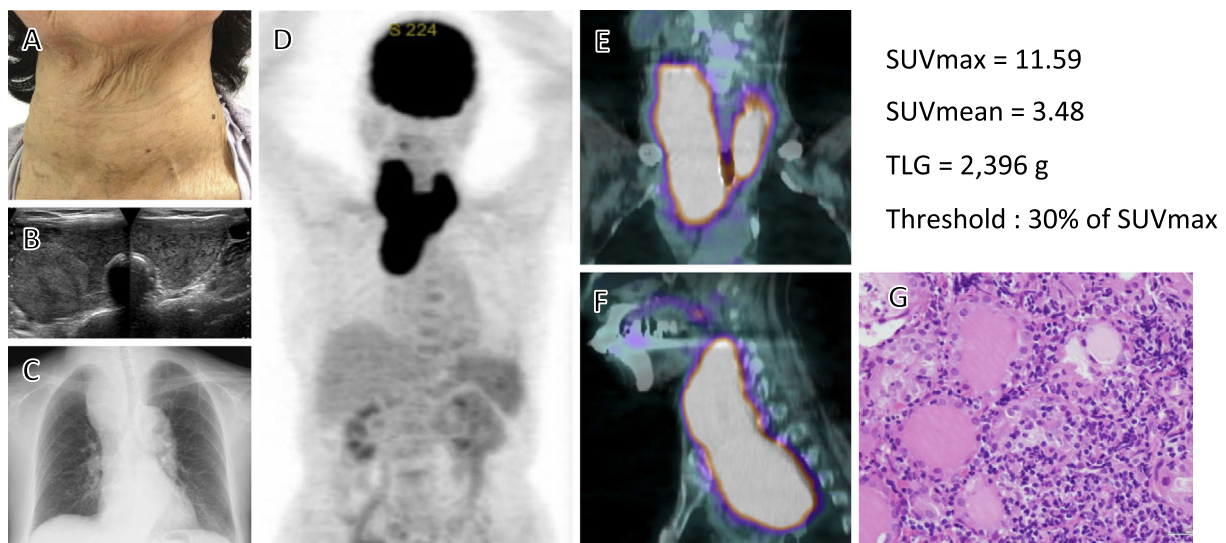
A Remarkable Uptake of FDG in Huge Mediastinal Hashimoto's Goiter

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Key words: FDG-PET, Hashimoto's thyroiditis, malignant lymphoma

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Picture.

The patient was an 80-year-old woman with an enlarged cervical mass (Picture A). Ultrasonography revealed a diffusely enlarged thyroid showing heterogeneous hypoechoogenicity (Picture B). Chest X-ray showed a dense shadow in the cervical to mediastinal region (Picture C). The patient's serum was positive for anti-thyroglobulin antibodies; the soluble interleukin-2 receptor (sIL-2R) level was 2,450 U/mL. Fluorodeoxyglucose positron emission tomography (FDG-PET) showed a specifically intense uptake (Picture D) in the cervical and mediastinal goiter (Picture E: *coronal*, Picture F: *sagittal*). A diagnosis of Hashimoto's autoimmune thyroiditis was made based on the histological examination of a core needle biopsy specimen (Picture G). Tumorous invasion of monoclonal B-lymphocytes was excluded by flow cytometry of a thyroid tissue specimen.

Enlargement of the thyroid is often observed in Hashimoto's thyroiditis (1), in which diffuse and high accumulation of FDG tracer is occasionally detected (2). A tissue biopsy should be considered early if the possibility of a thyroid neoplasm cannot be excluded based on the serum sIL-2R level and/or the acute enlargement of the goiter.

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

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