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

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The patient was an 80-year-old woman with an enlarged cervical mass (A). Ultrasonography revealed a diffusely enlarged thyroid showing heterogeneous hypoechochogenicity (B). Chest X-ray showed a dense shadow in the cervical to mediastinal region (C). The patient’s serum was positive for antithyroglobulin antibodies; the soluble interleukin-2 receptor (sIL-2R) level was 2,450 U/mL. FDG-PET showed a specifically intense uptake (D) in the cervical and mediastinal goiter (E: coronal, F: sagittal). A diagnosis of Hashimoto’s autoimmune thyroiditis was made based on the histological examination of a core needle biopsy specimen (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.

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Disclosure
The authors declare no financial relationships relevant to this publication.

References

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