Graves’ disease in an adolescent with dual congenital ectopia and no orthotopic thyroid gland identified by Tc-99m-pertechnetate SPET/CT imaging

Abstract

This is the first case of Graves’ disease in an adolescent with lingual and prelaryngeal dual congenital ectopia and no orthotopic thyroid gland identified by technetium-99m-pertechnetate (99mTcO₄⁻) SPET/CT imaging in a 15 years old boy. After 8 weeks treatment with methimazole, Graves’ disease subsided. Fine needle aspiration cytology of the mass revealed the normal colloid and normal follicular cells without an atypia or lymphoid elements, suggesting a benign ectopic thyroid gland. In conclusion, there is no report in the literature with DETT lingual and prelaryngeal absence of orthotopic thyroid tissue and Graves’ disease as in our case. This case also highlights the potential ascendancy of 99mTcO₄⁻ SPET/CT in diagnosing the DETT.

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