

An unusual case of desmoid tumor of the neck after total thyroidectomy and radioiodine therapy for papillary thyroid carcinoma

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Statement of the problem: the differential diagnosis of the neck lumps after total thyroidectomy for differentiated thyroid carcinoma is always a continuous and surprising challenge. Desmoid fibromatosis is an uncommon neoplasm characterized by extensive stromal proliferation of fibroblasts and myofibroblasts that usually develops as a part of an hereditary syndrome or more frequently, in a sporadic form, often after a local trauma. In this case, a locally aggressive desmoid fibromatosis developed in the thyroid bed after total thyroidectomy and radioiodine therapy (RAIU) for a classic papillary thyroid carcinoma (PTC). A 42-year-old woman was referred to our endocrine unit because of onset of worsening dysphagia, dyspnea and cough three months after total thyroidectomy and RAIU for a previously diagnosed classic PTC. A palpable firm mass in the neck was detected at clinical examination and ultrasound imaging (US) revealed an hypoechoic inhomogeneous mass in left thyroid bed. Serum ultrasensitive thyroglobulin (Tg) and thyroglobulin autoantibodies (TgAb) were both undetectable. Fine needle aspiration of the mass and Tg dosage on the wash-out liquid of the needle excluded the persistence/recurrence of PTC in thyroid left bed. The evidence of tracheal dislocation and compression at computed tomography (CT) scan indicated surgery. Any way only partial excision of the mass was possible because of tracheal adhesion. Diagnosis of desmoid tumor was made at pathology and patient was referred to the oncologic unit. Chemotherapy (vinorelbine and methotrexate) plus tamoxifen were started. Six months after CT and US revealed a significant reduction of the mass. Actually patient is on levothyroxine treatment (100mcg/die), ultrasensitive Tg is <0.1, TgAb <10UI/mL, indicating an excellence response to primary treatment of papillary thyroid carcinoma. Conclusions: desmoid fibromatosis should be take into account in the differential diagnosis of any souspicious mass in the thyroid bed.