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A closer look at NIFTP

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Abstract

Despite the rise in the incidence of papillary thyroid carcinoma (PTC) during the last 30 years, the mortality rate due to PTC has remained static. One reason for this phenomenon is the indolent nature of some of the tumors that are diagnosed as PTC. A subgroup of tumors, which often exhibited such indolent behavior, was encapsulated/well-circumscribed follicular lesions that showed PTC nuclear features. Despite their indolent behavior, these tumors were managed as was any other PTC, often with total thyroidectomy and radioactive iodine (RAI) treatment. In order to prevent overtreatment of these tumors, they were recently reclassified as "non-invasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP)." Since it is proposed that NIFTP be managed in a more conservative manner, its diagnosis is now based on strict histological criteria. The genetic basis of these diagnostic criteria and the utility of molecular markers in the diagnosis of NIFTP are currently being scrutinized. The aim of this review is to discuss the events that led to the emergence of the term NIFTP, as well as its histological and molecular background.

Keywords: BRAF V600E; Encapsulated follicular variant of papillary thyroid carcinoma; Indolent; NIFTP.