

표 1. 갑상선 핵심질문 1 근거표

핵심질문 1

문헌정보	연구유형	대상자 수	문헌 질 KCIG
Nayar R, Ivanovic M 2009 The indeterminate thyroid fine-needle aspiration: experience from an academic center using terminology similar to that proposed in the 2007 National Cancer Institute Thyroid Fine Needle Aspiration State of the Science Conference. Cancer 117: 195-202.	case-controlled study	5,194	2
Yang J, Schnadig V, Logrono R, Wasserman PG 2007 Fine-needle aspiration of thyroid nodules: a study of 4,703 patients with histologic and clinical correlations. Cancer 111:306-315.	case-controlled study	4,703	2
Nikiforov YE, Ohori NP, Hodak SP, Carty SE, LeBeau SO, Ferris RL, Yip L, Seethala RR, Tublin ME, Stang MT, Coyne C, Johnson JT, Stewart AF, Nikiforova MN 2011 Impact of mutational testing on the diagnosis and management of patients with cytologically indeterminate thyroid nodules: a prospective analysis of 1056 FNA samples. J Clin Endocrinol Metab 96:3390-3397.	case-controlled study	1,056	2
Nikiforov YE, Steward DL, Robinson-Smith TM, Haugen BR, Klover JP, Zhu Z, Fagin JA, Falciglia M, Weber K, Nikiforova MN 2009 Molecular testing for mutations in improving the fine-needle aspiration diagnosis of thyroid nodules. J Clin Endocrinol Metab 94:2092-2098.	case-controlled study	470	2
Jeong SH, Hong HS, Lee EH, Cha JG, Park JS, Kwak JJ 2013 Outcome of thyroid nodules characterized as atypia of undetermined significance or follicular lesion of undetermined significance and correlation with ultrasound features and BRAF(V600E) mutation analysis. AJR Am J Roentgenol 201:W854-W860.	case-controlled study	65	2
Yoo WS, Choi HS, Cho SW, Moon JH, Kim KW, Park HJ, Park SY, Choi SI, Choi SH, Lim S, Yi KH, Park do J, Jang HC, Park YJ 2014 The role of ultrasound findings in the management of thyroid nodules with atypia or follicular lesions of undetermined significance. Clin Endocrinol (Oxf) 80:735-742.	case-controlled study	5,062	2
Gweon HM, Son EJ, Youk JH, Kim JA 2013 Thyroid nodules with Bethesda system III cytology: can ultrasonography guide the next step? Ann Surg Oncol 20:3083-3088.	case-controlled study	155	2
Rosario PW 2014 Thyroid nodules with atypia or follicular lesions of undetermined significance (Bethesda Category III): importance of ultrasonography and cytological subcategory. Thyroid 24:1115-1120.	case-controlled study	150	1

Na DG, Kim JH, Sung JY, Baek JH, Jung KC, Lee H, Yoo H 2012 Core-needle biopsy is more useful than repeat fine-needle aspiration in thyroid nodules read as nondiagnostic or atypia of undetermined significance by the Bethesda system for reporting thyroid cytopathology. <i>Thyroid</i> 22:468-475.	case-controlled study	220	2
Alexander EK, Kennedy GC, Baloch ZW, Cibas ES, Chudova D, Diggans J, Friedman L, Kloos RT, LiVolsi VA, Mandel SJ, Raab SS, Rosai J, Steward DL, Walsh PS, Wilde JI, Zeiger MA, Lanman RB, Haugen BR 2012 Preoperative diagnosis of benign thyroid nodules with indeterminate cytology. <i>N Engl J Med</i> 367:705-715.	case-controlled study	265	1
Rago T, Scutari M, Latrofa F, et al. The large majority of 1,520 patients with indeterminate thyroid nodule at cytology have a favorable outcome, and a clinical risk score has a high negative predictive value for a more cumbersome cancer disease. <i>J Clin Endocrinol Metab.</i> 2014;99:3700-3707. [EL 2]	case-controlled study	1,520	2
McIver B, Castro MR, Morris JC, et al. An independent study of a gene expression classifier (Afirma) in the evaluation of cytologically indeterminate thyroid nodules. <i>J Clin Endocrinol Metab.</i> 2014;99:4069-4077. [EL 2]	case-controlled study	72	2
Nikiforov YE, Steward DL, Robinson-Smith TM, et al. Molecular testing for mutations in improving the fine-needle aspiration diagnosis of thyroid nodules. <i>J Clin Endocrinol Metab.</i> 2009;94:2092-2098. [EL 2]	case-controlled study	328	2
Na DG, Min HS, Lee H, Won JK, Seo HB, Kim JH. Role of core needle biopsy in the management of atypia/follicular lesion of undetermined significance thyroid nodules: comparison with repeat fine-needle aspiration in subcategory nodules. <i>Eur Thyroid J</i> 2015;4: 189-196	case-controlled study	158	2
Hahn SY, Shin JH, Han BK, Ko EY, Ko ES. Ultrasonography guided core needle biopsy for the thyroid nodule: does the procedure hold any benefit for the diagnosis when fineneedle aspiration cytology analysis shows inconclusive results? <i>Br J Radiol</i> 2013;86:20130007	case-controlled study	88	2
Hakala T, Kholová I, Sand J, Saaristo R, Kellokumpu-Lehtinen P. A core needle biopsy provides more malignancy-specific results than fine-needle aspiration biopsy in thyroid nodules suspicious for malignancy. <i>J Clin Pathol</i> 2013;66:1046-1050	case-controlled study	52	2
Trimboli P, Treglia G, Condorelli E, Romanelli F, Crescenzi A, Bongiovanni M, Giovanella L: BRAF-mutated carcinomas among thyroid nodules with prior indeterminate FNA report: a systematic review and meta-analysis.	systematic review and meta-analysis	1,361	1

Clin Endocrinol 2016;84: 315-320.			
Labourier E, Shifrin A, Busseniers AE, et al: Molecular testing for miRNA, mRNA and DNA on fine needle aspiration improves the preoperative diagnosis of thyroid nodules with indeterminate cytology. J Clin Endocrinol Metab 2015;100: 2743-2750.	case-controlled study	638	2
Lee KH, Shin JH, Oh YL, Hahn SY. Atypia of undetermined significance in thyroid fine-needle aspiration cytology: prediction of malignancy by US and comparison of methods for further management. Ann Surg Oncol 2014;21:2326-2331	case-controlled study	152	2
Kloos RT1, Reynolds JD, Walsh PS, Wilde JI, Tom EY, Pagan M, Barbacioru C, Chudova DI, Wong M, Friedman L, LiVolsi VA, Rosai J, Lanman RB, Kennedy GC. Does addition of BRAF V600E mutation testing modify sensitivity or specificity of the Afirma Gene Expression Classifier in cytologically indeterminate thyroid nodules J Clin Endocrinol Metab. 2013 Apr;98(4):E761-8. doi: 10.1210/jc.2012-3762. Epub 2013 Mar 8.	case-controlled study	292	2