Is basal ultrasensitive measurement of calcitonin capable of substituting for the pentagastrin-stimulation test?

Titre	Is basal ultrasensitive measurement of calcitonin capable of substituting for the pentagastrin-stimulation test?
Type de publication	Article de revue
Auteur	Pina, Géraldine [1], Dubois, Séverine [2], Murat, Arnaud [3], Berger, Nicole [4], Niccoli, Patricia [5], Peix, Jean-Louis [6], Cohen, Régis [7], Guillausseau, Claudine [8], Charrie, Anne [9], Chabre, Olivier [10], Cornu, Catherine [11], Borson-Chazot, Françoise [12], Rohmer, Vincent [13], Groupe français des tumeurs endocrines [14]
Editeur	Wiley
Type	Article scientifique dans une revue à comité de lecture
Année	2013
Langue	Anglais
Date	2013 Mar
Pagination	358-64
Volume	78
Titre de la revue	Clinical Endocrinology
ISSN	1365-2265
Mots-clés	Adolescent [15], Adult [16], Aged [17], Aged, 80 and over [18], Calcitonin [19], Carcinoma, Medullary [20], Child [21], Child, Preschool [22], Female [23], Humans [24], Male [25], Middle Aged [26], Multiple Endocrine Neoplasia Type 2a [27], Pentagastrin [28], Prospective Studies [29], Thyroid Neoplasms [30], Young Adult [31]

Résumé en anglais	**OBJECTIVE:** To evaluate a second-generation assay for basal serum calcitonin (CT) measurements compared with the pentagastrin-stimulation test for the diagnosis of inherited medullary thyroid carcinoma (MTC) and the follow-up of patients with MTC after surgery. Recent American Thyroid Association recommendations suggest the use of basal CT alone to diagnose and assess follow-up of MTC as the pentagastrin (Pg) test is unavailable in many countries. **DESIGN:** Multicentric prospective study. **PATIENTS:** A total of 162 patients with basal CT <10 ng/l were included: 54 asymptomatic patients harboured noncysteine 'rearranged during transfection' (RET) proto-oncogene mutations and 108 patients had entered follow-up of MTC after surgery. **MEASUREMENT:** All patients underwent basal and Pg-stimulated CT measurements using a second-generation assay with 5-ng/l functional sensitivity. **RESULTS:** Ninety-five per cent of patients with basal CT ≥ 5 ng/l and 25% of patients with basal CT <5 ng/l had a positive Pg-stimulation test (Pg CT >10 ng/l). Compared with the reference Pg test, basal CT ≥ 5 ng/l had 99% specificity, a 95%-positive predictive value but only 35% sensitivity (P < 0.0001). Overall, there were 31% less false-negative results using a 5-ng/l threshold for basal CT instead of the previously used 10-ng/l threshold. **CONCLUSION:** The ultrasensitive CT assay reduces the false-negative rate of basal CT measurements when diagnosing familial MTC and in postoperative follow-up compared with previously used assays. However, its sensitivity to detect C-cell disease remains lower than that of the Pg-stimulation test.
URL de la notice	http://okina.univ-angers.fr/publications/ua10549 [32]
DOI	10.1111/cen.12001 [33]
Lien vers le document	http://dx.doi.org/10.1111/cen.12001 [33]
Titre abrégé	Clin. Endocrinol. (Oxf)
Identifiant (ID) PubMed	22913268 [34]

Liens

[1] http://okina.univ-angers.fr/publications?f[author]=1075
[2] http://okina.univ-angers.fr/publications?f[author]=711
[3] http://okina.univ-angers.fr/publications?f[author]=18634
[4] http://okina.univ-angers.fr/publications?f[author]=1076
[5] http://okina.univ-angers.fr/publications?f[author]=1077
[6] http://okina.univ-angers.fr/publications?f[author]=1078
[7] http://okina.univ-angers.fr/publications?f[author]=1079
[8] http://okina.univ-angers.fr/publications?f[author]=1080
[9] http://okina.univ-angers.fr/publications?f[author]=1081
[10] http://okina.univ-angers.fr/publications?f[author]=822
[11] http://okina.univ-angers.fr/publications?f[author]=18636
[12] http://okina.univ-angers.fr/publications?f[author]=831
[13] http://okina.univ-angers.fr/vi.rohmer/publications
[14] http://okina.univ-angers.fr/publications?f[author]=18653
[15] http://okina.univ-angers.fr/publications?f[keyword]=1214
[16] http://okina.univ-angers.fr/publications?f[keyword]=1002
[17] http://okina.univ-angers.fr/publications?f[keyword]=1072
[18] http://okina.univ-angers.fr/publications?f[keyword]=1531

[19] http://okina.univ-angers.fr/publications?f[keyword]=1532
[20] http://okina.univ-angers.fr/publications?f[keyword]=1533
[21] http://okina.univ-angers.fr/publications?f[keyword]=1216
[22] http://okina.univ-angers.fr/publications?f[keyword]=1534
[23] http://okina.univ-angers.fr/publications?f[keyword]=1075
[24] http://okina.univ-angers.fr/publications?f[keyword]=991
[25] http://okina.univ-angers.fr/publications?f[keyword]=968
[26] http://okina.univ-angers.fr/publications?f[keyword]=5941
[27] http://okina.univ-angers.fr/publications?f[keyword]=6043
[28] http://okina.univ-angers.fr/publications?f[keyword]=1536
[29] http://okina.univ-angers.fr/publications?f[keyword]=6044
[30] http://okina.univ-angers.fr/publications?f[keyword]=6045
[31] http://okina.univ-angers.fr/publications?f[keyword]=6036
[32] http://okina.univ-angers.fr/publications/ua10549
[33] http://dx.doi.org/10.1111/cen.12001
[34] http://www.ncbi.nlm.nih.gov/pubmed/22913268?dopt=Abstract