

DAFTAR PUSTAKA

- Algin O., Algin E., Gokalp G., Erdogan C., Saraydaroglu O., Tuncel E. (2010). Role of duplex power doppler ultrasound in differentiation between malignant and benign thyroid nodules. *Korean J Radiol*, 11:594-602
- Brennan M, Franch J. (2007). Thyroid lumps and bumps. *Australian Family Phycisan Vol.* 36, No.7.
- Bergman, Afifi, Heidger. Atlas of microscopic anatomy. A functional approach companion to histology and neuroanatomy. 2nd ed. [cited on Oct. 2012] Available from :
<http://www.anatomyatlases.org/MicroscopicAnatomy/MicroscopicAnatomy.shtml>
- Bonavita et al. 2009. Pattern recognition of benign nodules at ultrasound of the thyroid: which nodules can be left alone? *AJR* 2009; 193: 207-13.
- Brunese et al. A new marker for diagnosis of thyroid papillary cancer. *J Ultrasound Med* 2008; 27: 1187-94.
- Cappelli C. et al. 2007. Fine needle cytology of complex thyroid nodules. (<http://www.eje-online.org>, diakses 1 September 2009)
- Chan JKC. The thyroid gland. In: Fletcher CDM, editor. Diagnostic histopathology of tumors. 3rd edition, volume 2. China: Churchill Livingstone Elsevier; 2007.p.997-1063.
- Chou YH, Tiu CM. In: Peh WCG, Hiramatsu Y. editors. The asian-oceanian textbook of radiology. Singapore: TTG Asia Media Pte Ltd. 2003.p.337-50.
- Clark et al. editors. Atlas of clinical oncology: endocrine tumor. Spain: BC Decker Inc; 2003.p.1-46.
- Dankle S. Thyroid nodule. [serial on the internet] 2012. [cited on August 2012]. Available from : <http://emedicine.medscape.com/article/127491-overview#showall>.
- Datu, R. dkk. Diktat colli facialis. Makassar: Bagian Anatomi Fakultas Kedokteran UNHAS. 2005. Hal. 14 -18.
- Decherd ME, Ryan MW, Quinn FB. Evaluation of thyroid nodule. Grand Rounds Presentation: UTMB Department of Otolaryngology; 2002
- Demer LM, Spencer CA. NACB: Laboratory support for diagnosis and monitoring of thyroid disease. NACB [serial on the internet] 2002. [cited on September 2012]. Available from : <http://www.aacc.org/members/nacb/archive/LMPG.thyroiddisease/pages/thyroiddiseaseword.aspx>.
- Ellis H. Thyroid. In: Ellis H. editor. Clinical anatomy. 10th edition. UK: Blackwell Science Ltd; 2002.p. 284-8.
- Faller A, Schanke M, Schanke G. The human body : an introduction to structure and function. Germany:Grammlisch;2004.p. 318-20.

Fine Needle Biopsy of Thyroid Nodules. Sultan Qaboos University Journal For Scientific Research. Medical Sciences. Are scintigraphy and ultrasonography necessary before fine needle aspiration cytology for thyroid nodules? Oman. 2001. Vol.1. p.29-33 Available at: <http://www.endocrineweb.com/fna.html>).

Gharib et al. AACE/AME guideline for clinical practice for the diagnosis and management of thyroid nodules. Endocr Pract 2006; 12(1); 65-90.

Gürsoy Alptekin, Erdoğan Murat Faik. Ultrasonographic approach to thyroid nodules: State of art. In: Peter PA Smyth, editors. Thyroid International. Published by: Merck KGaA, Darmstadt, Germany; 2012. P. 1-20

Halim H, : Aspek anatomi dan histologi kelenjar endokrin [serials on the internet]. Available from : <http://www.medicinesia.com>. [cited March 2013]

Hassell LA, Gillies EM, Dunn ST: Cytologic and molecular diagnosis of thyroid cancers: Is it time for routine reflex testing? Cancer Cytopathol 2011; 120: 7–17.).

Hedegus L. 2004. The Thyroid Nodule. [serials on the internet]. Available from : <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1450032/>. [cited December 2012]

Hedinger C, Williams ED, Sabin LH, 1989 The WHO histological classification of thyroid tumors: A commentary on the second edition.p. 1-17

Hong CY, Mei TC. Disease of the thyroid, parathyroid and salivary glands and cervical lymph nodes. Chapter 16. In: CG Peh W, Hiramatsu Y, editors. Textbook of radiologi. Singapore: TTG Asia Media; 2003. P. 342-50.

Hoang JK, Lee WK, Lee M, Johnson D, Farrell S. (2007). US features of thyroid malignancy; pearls and pitfalls. *RadioGraphics*; 27:847-865

Iannuccilli JD, Cronan JJ, Monchik JM. (2004). Risk of malignancy of thyroid nodules as assessed by sonographic criteria. *J Ultrasound Med*; 23: 1455-1464.

Jameson JL, Weetman AP. Disorder of thyroid gland. In: Kasper DL, Fauci AS, Longo DL, Braunwald E, Hauser S, editors. Harrison's principles of internal medicine. 16th edition. USA: McGraw-Hill Companies Inc; 2005. p. 2104-23.

Kocjan G. Fine-needle aspiration cytology "Diagnostic Principles and Dilemmas". Springer. London. 2006. p: 215.Editor K.J. Lee. Essensial Otolaryngology "Head and Neck Surgery". 8th ed. McGraw-Hill. USA. 2003. p:632-634)

Khan AN. Thyroid nodules. Emedicine [serial on the internet]. 2010. [cited August 2012]. Available from : http://www.emedicine.medscape.com/radiology/head_and_neck.

Kim MJ, Kim EK, Park SI, Kim BM, Kwak JY, Kim SJ, Youk JH, Park SH. (2008). US-guided fine-needle aspiration of thyroid nodules: indication, techniques, results. *RadioGraphics*; 28: 1869-1889

Koss LG. Morphologic characteristic of cancer cells. In: Koss LG, Editor. Diagnostic cytology and its histopathologic bases. 4th edition. Philadelphia: JB Lippincott Company; 1992. p. 129.

- Krohn et al. Pathogenesis of euthyroid and multinodular toxic goiter. Endocrine review 2005; 26(4): 504-24.
- Kharchenko et al. 2010, *Ultrasound Diagnostics of Thyroid Diseases*, Springer-Verlag Berlin Heidelberg
- Kumar V, Abbas AK, Fausto N. Thyroid. In: Robbins and cotran pathologic basis of disease. Seventh edition. China: Elsevier Saunders; 2005.p.289-90.
- Ladenson PW. Goiter and thyroid nodules. [cited on Oct 2012] Available from : <https://knol.google.com/k/paul-w-ladenson-md/goiter-and-thyroid-nodules/uR0IJFRYF>
- Lansford CD, Teknos TN. Evaluation of thyroid nodule. Cancer Control 2006; 13: 89-98.
- Layfield LJ, Cibas ES, Gharib H, Mandel SJ. 2009. Thyroid aspiration cytologic : (<http://caonline.amcancersoc.org/cgi/reprint/59/2/99>, diakses 3 September 2009).
- Lee YH, Kim DW, In HS, Park JS, Kim SH, Eom JW, Kim B, Lee EJ, Rho MH. (2011). Differentiation between benign and malignant solid thyroid nodules using an US classification system. *Korean J Radiology*; 12(5): 559-567
- Maitra A, Abbas AK. The endocrine system. In: Kumar V, Abbas AK, Fausto N editors. In: Robbins and cotran pathologic basis of disease. Seventh edition. China: Elsevier Saunders; 2005.p.1175-83.
- Masjhur JS. Nodul tiroid. Dalam : Sudoyo AW, Setiyohadi B, Alwi I, Simadibrata M, Setiati S, editors. Buku ajar penyakit dalam. Jakarta: Balai penerbit FKUI; 2006. hal. 1953-58.
- Massimo Bongiovanni, Alessandra Spitale, 2012, meta analisis bethesda
- Mettler FA, Guibertau MJ. Thyroid, parathyroid and salivary gland. In : Mettler FA, Guibertau MJ. Editor. Essentials of nuclear medicine imaging. Fifth edition. China: Saunders Elsevier; 2006 p. 75-99.
- Miller JC, Lee SI. Management of thyroid nodules. Radiology Rounds 2005; 3(3):1-2.
- Netter, FH. Atlas of human anatomy. 4th Ed. Elsevier. 2000.p.68
- Orell SR, Sterret GF, Whitaker D. Thyroid. In: Orell SR, Sterret GF, Whitaker D, editor. Fine needle aspiration cytology. 4th edition. China: Elsevier Limited; 2005. p. 125-30.
- Popli MB, Rastogi A, Bhalla PJS, Solanki Y (2012) Utility of grayscale ultrasound to differentiate benign from malignant thyroid nodules. *Indian J Radology Imaging*; 22:63-68
- Rago et al. Role of conventional ultrasonography and color-flow doppler sonography in predicting malignancy in cold nodule thyroid. European Journal of Endocrinology 1998; 138: 41-6.
- Rasad Sjahriar, dkk. Radiologi Diagnostik. Ultrasonografi Tiroid. Edisi kedua. Cetakan ke-6. Jakarta. 2005. hal: 453-457, 528-535.)
- Ries LAG, Melbert D, Krapcho M, et al: SEER Cancer Statistics Review, 1975–2005. Bethesda, National Cancer Institute, 2007. http://seer.cancer.gov/csr/1975_2005/5 Chen AY, Jemal A, Ward EM:

- Increasing incidenceof differentiated thyroid cancer inthe United States, 1988 –2005. *Cancer* 2009;115: 3801–3807.)
- Robinson S. Thyroid and parathyroid neoplasms. In: Herman R. editor. Head and neck cancer imaging. Germany: Springer-Verlag; 2006.p.271-87.
- Ross DS: Predicting thyroid malignancy (editorial).*J Clin Endocrinol Metabol* 2006; 91:4253–4255).
- Salvatore et al. Thyroid Gland. In: Melmed S. et al.(Eds) Wlliams Textbook of endocrinology, 12th ed. 2011
- Schäberle W. Fundamental principles. In: Schäberle W, editor. Ultrasonography in vascular diagnosis. Germany: Springer-Verlag Berlin; 2005. p. 1-8
- Sri Hartini, Ilmu Penyakit Dalam, jilid I, hal. 461, FKUI, 1987
- Subekti I. Pengelolaan nodul tiroid. dalam *The 4th Annual Scientific Meeting of Radiology*. Jakarta, 2006. 84-92.
- Tessler FN, Tublin ME. Thyroid sonography: current applications and future directions. *AJR* 1999; 173: 437-43.
- Visalli C. Benign and malignant neoplasms of thyroid. In: Baert. Editor. Encyclopaedia of diagnostic imaging. Volume 2. Berlin. Germany: springer-Verlag; 2008.p.1321-25.
- Welker & Orlov Welker MJ and Orlov D. 2003. Thyroid Nodules. [cited on August 2012]. Available from : <http://www.afserv@aafp.org>.
- Wienke JR, Chong WK, Fielding JR, Zou KH, Mittelstaedt CA. Sonographic features of benign thyroid nodules. *J Ultrasound Med.* 2003; 22: 1027-31.
- Yoon DY, Lee JW, Chang SK, Choi CS, Seo YL, Kim KH et al. Peripheral calcification in thyroid nodules. *J. Ultrasound Med* 2007; 26: 1349-55.

KEMENTERIAN PENDIDIKAN NASIONAL
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN
KOMISI ETIK PENELITIAN KESEHATAN



Sekretariat : Lantai 3 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10, Makassar. Telp. (0411)5780103, Fax (0411) 581431.
Contact person dr. Agussalim Bukhari,PhD,SpGK (HP. 081241850858), email: agussalimbukhari@yahoo.com

REKOMENDASI PERSETUJUAN ETIK

Nomor : 0874 /H4.8.4.5.31/PP36-KOMETIK/2013

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Hasanuddin, setelah melalui pembahasan dan penilaian, pada rapat tertanggal **15 Mei 2013**, telah memutuskan, protokol penelitian berjudul:

Hubungan Antara Gambaran Ultrasonografi Tiroid Berdasarkan Klasifikasi TIRADS dengan Klasifikasi Sitopatologi BETHESDA pada Nodul Tiroid

dengan Peneliti Utama: **dr. Ramlah Massing**

No. Register

U	H	1	3	0	4	0	1	7	9
---	---	---	---	---	---	---	---	---	---

yang diterima pada tanggal: **24 April 2013**

Perbaikan diterima tanggal: **27 Mei 2013**

dapat disetujui untuk dilaksanakan di RS dr. Wahidin Sudirohusodo di Makassar.

Persetujuan Etik ini berlaku sejak tanggal ditetapkan sampai dengan batas waktu pelaksanaan penelitian.

Pada akhir penelitian, **laporan pelaksanaan penelitian** harus diserahkan kepada KEPK Fakultas Kedokteran Unhas. Jika ada perubahan protokol dan /atau perpanjangan penelitian, harus mengajukan kembali permohonan kajian etik penelitian (amandemen protokol).

Makassar, 3 Juni 2013

Komisi Etik Penelitian Kesehatan Fak. Kedokteran Unhas

Ketua

Prof.Dr.dr.Suryani As'ad,M.Sc,Sp.GK
NIP 19600504 1986 01 2 002



Lampiran 2

**FORMULIR PERSETUJUAN
PESERTA PENELITIAN**

Dengan ini saya :

N a m a	:	.....
Umur	:	.....
Jenis Kelamin	:	.....
Pekerjaan	:	.....
Alamat	:	.....
No. KTP	:	.....

Setelah mendapatkan keterangan secukupnya serta menyadari manfaat dan risiko penelitian yang berjudul :

**HUBUNGAN ANTARA GAMBARAN ULTRASONOGRAFI TIROID
BERDASARKAN KLASIFIKASI TIRADS DENGAN KLASIFIKASI
SITOPATOLOGI BETHESDA PADA NODUL TIROID**

dengan sukarela menyatakan menyetujui diri saya sendiri / istri / suami / anak / ayah / ibu / saudara *) saya :

N a m a	:	.....
Umur	:	.....
Jenis Kelamin	:	.....
Alamat	:	.....
No. KTP	:	.....
Dirawat di	:	.....
Nomor Rekam Medis	:	.....

untuk diikutsertakan dalam penelitian tersebut di atas dengan catatan apabila suatu waktu merasa dirugikan dalam bentuk apapun, berhak membatalkan persetujuan ini.

Dokter

Makassar, 2013
Peserta / Wali *) Penelitian,

(.....)

(.....)

Saksi I

Saksi II

(.....)

(.....)

Tempat meminta penjelasan :

Pejabat Peneliti,

Nama : dr. Ramlah Massing

**Alamat (RS) : Bagian Radiologi FK. Unhas / Bagian Radiologi RSUP. dr. Wahidin Sudirohusodo - Makassar
Jl. Talasalapang II Kompleks P dan K blok J1/7 Makassar**

Telepon(HP) : 081340870554

Pejabat medis,

Penanggungjawab medis : dr. Nirlaily Idris, Sp.Rad(K)

**Alamat (RS) : Bagian Radiologi FK. Unhas / Bagian Radiologi RSUP. dr. Wahidin Sudirohusodo - Makassar
Jl. Sunu Komp. UNHAS H 13**

Telpo(HP) : 0811444920

DISETUJUI OLEH KOMISI
PENELITIAN KESEHATAN
FAK. KEDOKTERAN
UNHAS

TGL.....

Lampiran 3. FORM KUESIONER

I. Data Pribadi

Nama : _____

Umur : _____

Gender : _____

II. Pemeriksaan USG TIRADS

- Echogenisitas : _____

- Ukuran : _____

- Batas : _____

- Tepi : _____

- Halo sign : _____

- Kapsula : _____

- Komposisi : _____

- Kalsifikasi : _____

- Skor TIRADS : _____

III. Hasil Sitopatologi BETHESDA

Lampiran 4. TABULASI DATA SAMPEL PENELITIAN DENGAN JUDUL :
**HUBUNGAN ANTARA GAMBARAN ULTRASONOGRAFI TIROID
 BERDASARKAN KLASIFIKASI TIRADS
 DENGAN KLASIFIKASI SITOPATOLOGI BETHESDA
 PADA NODUL TIROID**

Waktu Penelitian : Mei - Agustus 2013

NO.	NAMA	UMUR (THN)	JENIS KELAMIN	TIRADS	BETHESDA	HASIL EXPERTISE FNAB
1	Ny. Nw	47	P	2	2	suspect struma coloides cystic
2	Ny. Sm	60	P	5	4	neoplasma folikulare thyroidea
3	Ny. NI	47	P	4B	4	neoplasma folikulare thyroidea
4	Tn. Li	41	L	2	2	struma adenomatous
5	Ny. Na	77	P	2	2	benign folikulare nodule / susp. struma coloides
6	Ny. Mf	60	p	2	2	benign folikulare nodule /susp. struma adenomatous
7	Ny. DG. S	53	P	2	2	lesi cystic thyroid
8	Ny. Dd	31	P	2	2	benign folikulare nodule /susp. struma adenomatous
9	Ny. Rw	38	P	4B	6	high grade malignant tumor (susp. undifferentiated ca. thyroid)
10	Ny. An	52	P	4B	6	apusan terdapat sel epitel maligna
11	Ny. Ws	51	P	4B	4	neoplasma folikulare nodul thyroid
12	Ny. Ba	43	P	2	2	benign folikulare nodul thyroid (susp. struma adenomatosa)
13	Ny. Hm	36	P	2	2	benign folikulare nodul thyroid (susp. struma adenomatosa)
14	Ny. Sp	33	P	5	4	neoplasma folikulare
15	Ny.Si	56	P	4B	4	neoplasma folikulare thyroidea

16	Ny. Iu	74	P	2	2	suspek struma adenomatosa
17	Ny. Yh	44	P	3	2	benign folikulare thyroidea
18	Ny. Na	47	P	4A	4	neoplasma folikulare
19	Tn. H	42	L	4B	4	suspect neoplasma foliculare thyroid
20	Ny. H	53	P	2	3	radang granulomatosa supurativa susp. Tbc
21	Ny. A	32	P	4A	4	suspect neoplasma folikulare tiroid
22	Ny. Yo	55	P	2	2	struma coloides cystic
23	Ny. M	44	P	3	2	benign folikulare nodul thyroid (s/ str. adenomatosa)
24	Tn. B	45	L	2	2	suspect struma coloides cystic
25	Ny. Tr	34	P	3	2	adenoma folikulare thyroidea
26	Ny. Jw	61	P	2	2	struma adenomatous
27	Tn. Ah	44	L	4A	6	metastasis scc, tidak berdiferensiasi bilateral
28	Ny. Ad	44	P	2	2	susp. lesi jinak thyroid
29	Tn. Tk	53	L	4A	4	susp. neoplasma foliculare thyroid dd/ str adenomatosa
30	Tn. Um	66	L	2	2	suspect struma coloides cystic
31	Ny. Na	31	P	3	2	lesi jinak thyroid suspect struma coloides
32	Ny. Sr	32	P	3	2	lesi jinak tiroid (str. adenomatosa dpt dipertimbangkan)
33	Ny. In	29	P	2	2	lesi jinak tiroid suspek struma colloidies cystica
34	Tn. Gs	47	L	2	2	lesi cystic thyroid suspect struma colloidies cystica
35	Ny. Ds	63	P	3	2	struma colloidies
36	Ny. Ev	38	P	3	2	struma adenomatosa
37	Ny. Ap	32	P	3	2	benign folliculare nodul thyroid (susp. struma adenomatous
38	Ny. S	36	P	2	2	struma adenomatosa
39	Tn. Mkf	55	L	2	2	struma colloidies
40	Ny.Ns	56	P	2	2	struma adenomatosa
41	Ny. As	35	P	2	2	struma adenomatosa + thyroiditis hashimoto
42	Ny. Ba	75	P	2	2	struma adenomatosa
43	Ny. Sm	38	P	2	5	str.adenomatosa dgn 1 fokus adenoca papilferum var.folikulare
44	Ny. SN	39	P	2	2	struma adenomatosa
45	Ny.M	42	P	2	2	struma colloidies

46	Ny. E	49	P	2	2	struma adenomatosa
47	Ny. M	36	P	2	2	struma colloides
48	Ny. Sn	54	P	2	2	str. adenomatosa dgn bbrp fokus adenoma follikuler
49	Ny. Hn	30	P	2	5	str.adenomatosa dgn 1 mikro fokus adenoca papiler var. folikuler
50	Ny. Nu	42	P	3	2	struma adenomatosa
51	Ny. Ad	29	P	3	2	thyroiditis hashimoto
52	Ny. No	21	P	3	2	struma adenomatosa
53	Ny. Im	48	P	4A	3	adenoma follikular thyroidea
54	Ny. Nu	33	P	4A	6	adeno ca papillary throidea dgn fokus thyroiditis hashimoto
55	Ny. It	32	P	4A	2	struma adenomatosa
56	Ny. Me	49	P	4A	3	adeno ca differensiasi jelek
57	Tn. Ho	29	L	4B	6	papillary thyroid carcinoma variant folliculare
58	Ny. Se	35	P	4B	6	adenocarcinoma papillare thyroidea
59	Ny. Mt	38	P	4B	6	papillary thyroid carcinoma variant folliculare
60	Ny. Mo	53	L	4B	2	struma adenomatosa
61	Ny. Mu	41	P	4B	6	papillary thyroid carcinoma variant folliculare
62	Ny. Nm	40	P	4B	6	papillary thyroid carcinoma variant folliculare
63	Nn. Se	24	P	4B	2	struma adenomatosa
64	Ny. In	67	P	4B	6	papillary thyroid carcinoma variant folliculare
65	Ny. Me	58	P	4B	6	adeno ca papillary thyroidea
66	Ny. Ha	34	P	4B	6	papillary thyroid carcinoma variant folliculare
67	Ny. Su	16	P	4B	6	adenocarcinoma papillare thyroidea
68	Ny. Es	34	P	5	6	papillary thyroid carcinoma variant folliculare
69	Ny. N	32	P	5	6	adenocarcinoma papillare thyroidea
70	Ny. Ha	71	P	5	6	papillary thyroid carcinoma variant folliculare
71	Ny. Me	55	P	5	6	papillary thyroid carcinoma variant folliculare
72	Ny. Ma	60	P	5	6	papillary thyroid carcinoma variant folliculare
73	Ny. Nd	38	P	5	6	papillary thyroid carcinoma variant folliculare

Lampiran 5.***CURRICULUM VITAE*****I. Data Pribadi**

1. Nama : dr, Ramlah Massing
2. Tempat / tanggal lahir : Jakarta / 28 Agustus 1976
3. Alamat : Jl.Talasalapang II Kompleks P dan K
Blok J1/7 Makassar
4. Status Sipil : Menikah
 - a. Nama suami : dr.Zulfikar Djafar, M.Kes, Sp.An.
 - b. Nama anak : Shafira Alya Putri Zulfikar
Nadya Azzahra Zulfikar

II. Riwayat Pendidikan**Pendidikan Formal :**

- Tamat SD tahun 1989 di SDN 01 Pagi Jakarta
- Tamat SMP tahun 1991 di SMPN 47 Jakarta
- Tamat SMU tahun 1994 di SMUN 30 Jakarta
- Sarjana (S1) / Dokter tamat tahun 2002 di Fakultas Kedokteran Universitas YARSI Jakarta

III. Riwayat Pekerjaan

Dokter PTT tahun 2002-2005 di Puskesmas Tellu SiattingE, Kabupaten Bone, Sulawesi Selatan

Dokter PNS tahun 2005-2007 di Puskesmas Sapaya, Kabupaten Gowa, Sulawesi Selatan

Dokter PNS tahun 2007-2009 di Puskesmas Bajeng, Kabupaten Gowa, Sulawesi Selatan

IV. Karya Ilmiah / Artikel jurnal yang sudah dipublikasikan : -

V. Makalah pada Seminar / Konferensi Ilmiah Nasional dan Internasional

Single Atrium. Pertemuan Ilmiah Tahunan (PIT) Chest Emergency Radiology Malang, 2011

