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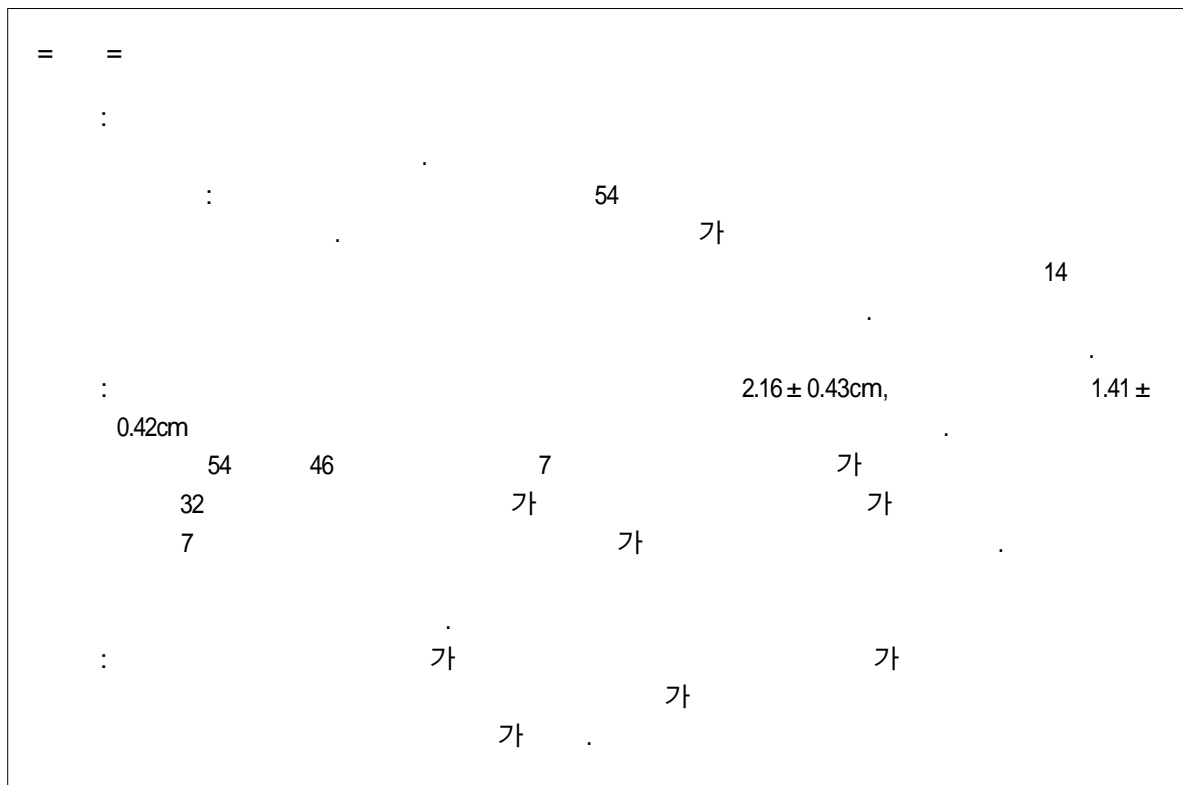
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:Thyroid, US
Thyroid, abnormalities
Thyroid, inflammation
Thyroid, function
Thyroiditis

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[1-5].

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30 50
가 가

-35) 11 , 3
가 antimicrosomal
antibody가
4 1

T3, T4, TSH thyroglobulin antibody, antimicrosomal
antibody

5
UM-9(ATL, Borhell, Washington, U.S.A.) VST Master
(Diansonics, Milpitas, CA, USA)
10MHz

가 (follicle) (isthmus)

[6-8].

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1/3

가 (Fig. 1).

1994 11 1998 10

가 0-25, 26-50, 51-75, 76-100%

54
40 (11 -64) 50
4 14

Pearson correlation one-way ANOVA test

28 (19

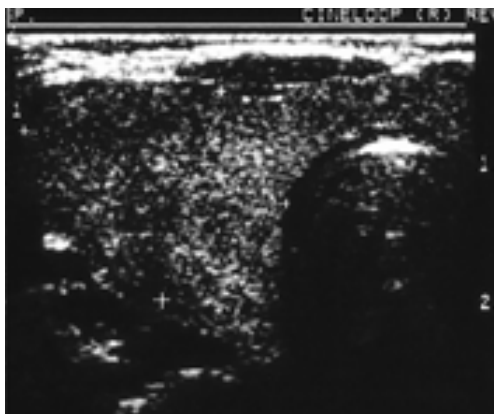


Fig. 1. Measurement of the mean diameter of the thyroid gland at isthmus level. Lateral longest diameter was measured, and AP diameter was measured perpendicular to the lateral longest diameter, at the cross of inner one third. Mean diameter was obtained from these two values.

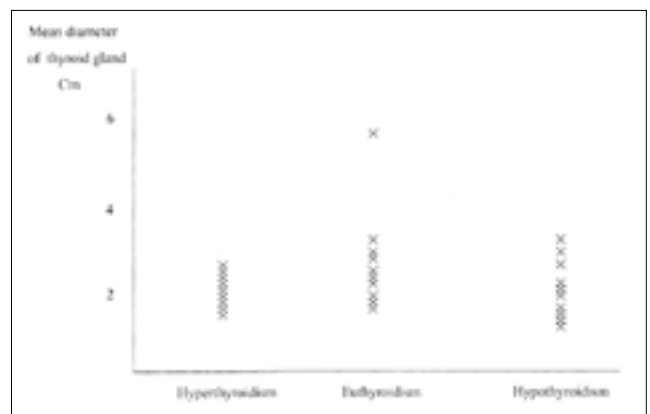


Fig. 2. Thyroid functional status and mean diameter show no relationship.($p>0.05$)

[9-11], Hayashi [9]
A,

19 , 2 , B A
12 , 가 21 , 가
1 B 가
2.16 ± 0.43cm, 1.41 ± 0.42cm
(p<0.01). . Sostre [10] A
(Fig 2) (p>0.05). 7 1, 가
가 39 2, 가
(Fig. 3) 9 3, 가
가 4
가 가 가 7 가
가 가 가 3 2.16 ± 0.43cm , 1.41 ± 0.42cm
4 54 37 가
(Fig. 4). 8 30 가
5 가 7 가

(p<0.001, correlation coefficient 0.443) (Table 1) (Fig. 5).

Table 1. Relationship between thyroid function and extent of low echoic lesions

Thyroid function status	Extent of low echoic lesion			
	0-25%	25-50%	50-75%	75-100%
Hyperthyroidism(n= 2) Subclinical	1	1	0	0
hypertyroidism(n=17)	8	4	0	5
Euthyroidism(n=19) Subclinical	0	5	7	7
hypothyroidism(n=11)	1	1	0	9
Hypothyroidism(n=1)	0	0	0	1

1912
struma lymphomatosa,
가가 가 ,

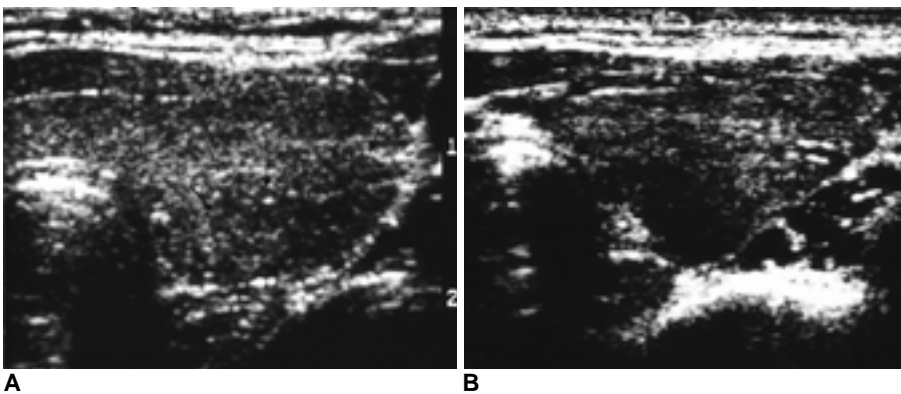


Fig. 3. A. Fifty one years old patient was diagnosed as Hashimoto 's thyroiditis. On axial scan, there is a ill defined low echoic lesion(arrows) located in subcapsular portion. This is a typical finding at Hashimoto 's thyroiditis. **B.** Another case of 35 old patient also diagnosed as Hashimoto 's thyroiditis also shows ill defined low echogenity in subcapsular portion. This scan was also obtained on axial scan.

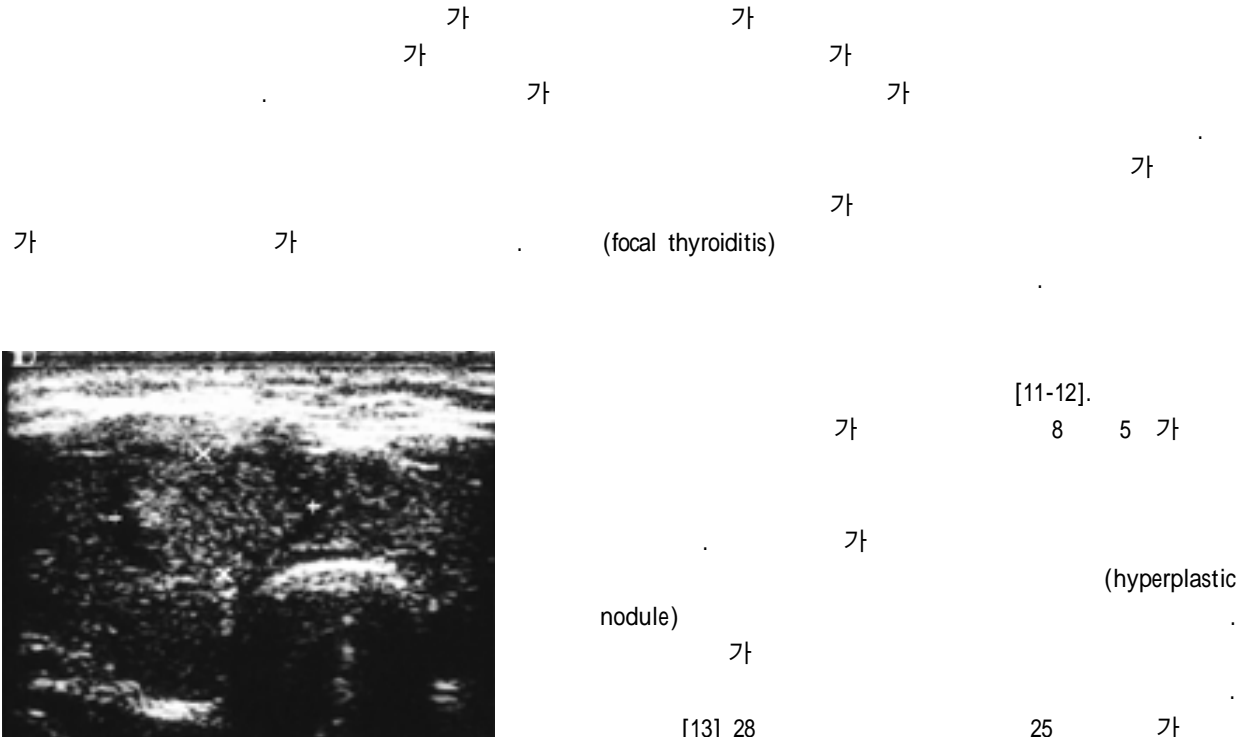


Fig. 4. Thirty five year old patient was diagnosed as Hashimoto ' s thyroiditis. On axial scan, there was a well defined nodule with peripheral halo in the central portion of thyroid gland. Another nodule was also noted at contralateral lobe, not shown in this figure, suggesting nodular Hashimoto ' s thyroiditis.

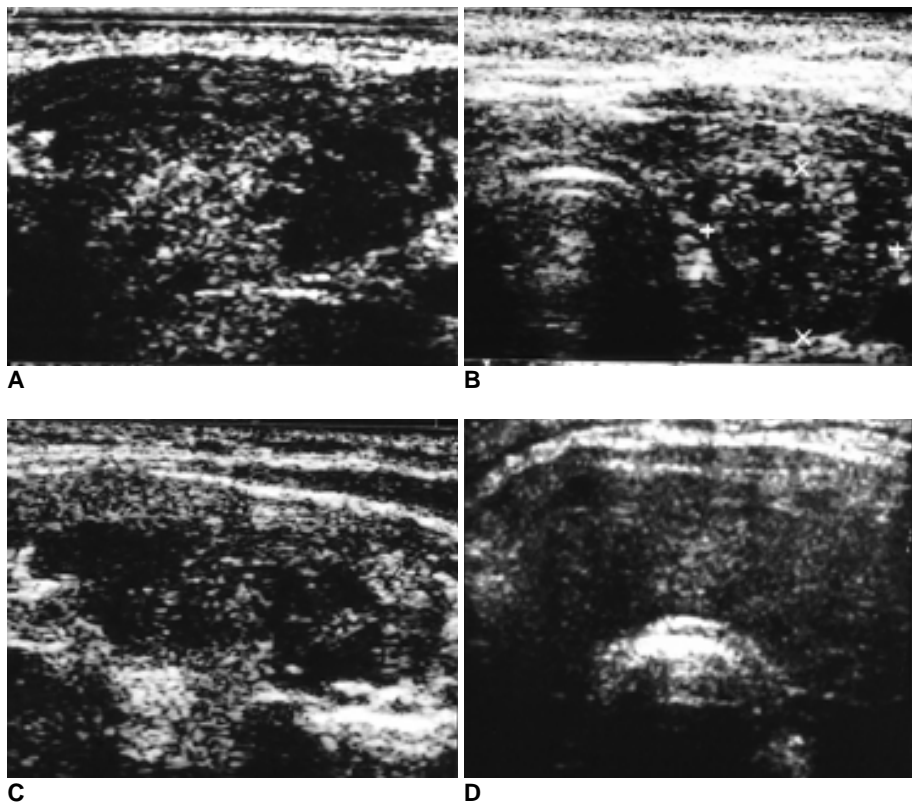


Fig. 5. Relationship between thyroid function and extent of low echoic lesion. **A.** Focal area of low echoic lesion less than 25% against thyroid gland. This patient was in hyperthyroid status **B.** Subclinical hyperthyroid status;focal low echoic lesion occupying 25-50% **C.** Subclinical hypothyroidism status; Note more extensive area of low echoic lesion(arrows) as compared to B. **D.** Thirty years old patient in hypothyroid status-Diffuse area of low echoic lesion and thyroid gland enlargement is noted. All cases except B were obtained on axial scan, and case B was obtained on sagittal scan.

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= Abstract =

Ultrasonographic Evaluation of Hashimoto 's Thyroiditis: Comparison of Size and Echo Change with Thyroid Function

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Purpose : To demonstrate sonographic features of Hashimoto 's thyroiditis according to the thyroid function.

Materials and Methods : We reviewed 54 thyroid ultrasonographic examinations of untreated Hashimoto 's thyroiditis.

We reviewed thyroid ultrasonographic examinations and focused on the presence of ill defined low echoic lesion and glandular enlargement. We performed another thyroid ultrasonographic examination of 14 healthy volunteers, in order to obtain normal size of thyroid gland. Comparison was made between these morphologic characteristics and functional stage of the disease.

Results : The mean diameter of thyroid gland was 2.16 ± 0.43 cm in patients with Hashimoto 's thyroiditis, and 1.41 ± 0.42 cm in normal control group of the thyroid gland. There was no statistically significant relationship between thyroid function and size. There was morphologic abnormalities in 46 patients(85%). Among them, 7 patients revealed diffuse low echogenicity in the entire thyroid gland, 32 patients showed peripherally located, ill defined focal hypoechoic lesion, and 7 patients showed solitary or multiple, well defined nodular lesions. Decreased echogenicity of the thyroid gland was related to hypothyroid status.

Conclusion : Hashimoto 's thyroiditis has specific morphologic characteristics in ultrasonographic features, which are well correlated with thyroid function.

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