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Clinical Characteristics of Stomach Cancer Diagnosed in Health Screening Center

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Abstract : Stomach cancer is the most common malignancy in Korea. Nowadays, the detection rate of early gastric cancer is increasing, whereas the mortality rate is decreasing. We conducted this study to evaluate whether there are any different characteristics in stomach cancers diagnosed in Health Screening Center. We surveyed retrogradely 1,717 stomach cancer patients who were pathologically confirmed from Jan. 1997 to Aug. 2001. Sixty six patients were diagnosed in Health Screening Center, and the other 1,651 patients diagnosed at other clinical departments. In this study, several factors such as age, gender, histologic type, tumor size, stage and survival rate were evaluated to determine the characteristics. In analysis of these factors, no remarkable characteristic differences between the two groups was found.

Key Words : Health Screening Center, Stomach cancer

가 [1]. (health belief model) Kaplan-Meier rank test Log-Cox's proportional hazards regression model . P 0.05 [2]. () 가 가 1. 1,135 , 582 59.2 59.6 , 1997 1 2001 8 58.4 1,717 (Table 1). 66 () 66.7%, 33.5%, 66.1%, 39.1% 1,651 (Table 2).

Table 1. Demographic characteristics according to age and gender

	Number	Age (yr) Mean (range)	P value
Male	1,135	59.6 ± 11.8 (22-89)	.060
Female	582	58.4 ± 14.0 (19-90)	
Total	1,717	59.2 ± 12.6 (19-90)	

Table 2. Gender distribution between HC and NHC groups

	Male	Female	Total	P value
HC	44 (66.7%)	22 (33.3%)	66	.922
NHC	1,091 (66.1%)	560 (33.9%)	1,651	
Total	1,135 (66.1%)	582 (33.9%)	1,717	

HC: Health screening center; NHC: Non-health screening center.

2. (Table 3)

1) 53.3%, 58.8%

3) Ming expansion, CEA, CA 19-9, Ming expansion

2) WHO tubular, signet-ring

4) 3.1 ± 2.20 cm, 3.7 ± 2.48 cm

WHO cell, Lauren

Table 3. Clinical characteristics according to diagnosing department

	HC	NHC	P value
Histologic grade 2:3	37.7% : 54.7%	39.6% : 50.5%	.771
Vascular invasion	53.3%	58.8%	.673
WHO classification			
tubular	55.0%	60.7%	
signet ring cell	30.0%	28.9%	.881
Lauren			
intestinal	62.5%	51.7%	
diffuse	37.5%	48.3%	.391
Ming expanding	7.7%	6.6%	.955
Nerve invasion	41.2%	46.7%	.650
Tumor markers			
CEA	16.2 ± 7.87	16.6 ± 3.46	.979
CA 19-9	20.8 ± 5.2	253.9 ± 75.3	.357
Tumor size (cm)	3.1 ± 2.20	3.7 ± 2.48	.184
Stage			
Ia	17 (32.7%)	428 (28.2%)	
Ib	10 (19.2%)	172 (11.3%)	
2	4 (7.7%)	172 (11.3%)	
3a	6 (11.5%)	199 (13.1%)	
3b	6 (11.5%)	134 (8.8%)	
4	9 (17.3%)	411 (27.1%)	.311
Treatment			
Total gastrectomy	7 (4%)	169 (96%)	
Subtotal gastrectomy	28 (3.2%)	849 (96.8%)	.158
OP complication	6.9%	10.4%	.390
Death rate	12 (18.2%)	436 (26.4%)	.136
Recurrence rate	2 (5.6%)	141 (14.1%)	.278

HC : Health screening center; NHC : Non-health screening center.

가 7) 18.2%,
 26.5% 5.6%,
 5) 14.1%
 1a 28.4%, 1b 11.6%, 2 11.2%, 3a 13.1%, 3b 8.9%, 4 26.8% .
 1a 32.7%, 1b 19.2%, 2 7.7%, 3a 11.5%, 3b 11.5%, 4 17.3%
 , 1a 28.2%, 1b 11.3%, 2 11.3%, 3a 13.1%, 3b 8.8%, 4 27.1%
 6) 7 , 2) 5 1a 89.9%, 1b 28 , 849 . 80.5%, 2 84%, 3a 51.7%, 3b 43.3%, 4 0% , 1a 64 , 1b 57 , 2 58 , 3a 45 , 3b 36 , 4 13 (Table 4).
 6.9%, 10.4% 4.

Table 4. Survival rate according to stage

	1 yr	2 yr	3 yr	4 yr	5 yr	Mean	P value
HC	84.9%	80.3%	77.2%	69.5%		46.0%	1.323
NHC	78.8%	69.8%	63.9%	62.0%	59.0%	47.0%	
Total	78.1%	70.2%	64.4%	62.3%	59.4%	47.0%	
Stage							
1a	98.2%	96.9%	96.2%	94.0%	89.9%	64.0%	
1b	95.5%	90.4%	84.0%	84.0%	80.5%	57.0%	
2	90.9%	86.8%	84.0%	84.0%	84.0%	58.0%	
3a	88.6%	71.1%	61.2%	55.4%	51.7%	45.0%	
3b	83.0%	58.4%	43.3%	43.3%	43.3%	36.0%	
4	31.5%	18.4%	8.0%	8.0%	0%	13.0%	.0000

HC: Health screening center; NHC: Non-health screening center.

가 , Cox 가 [3]. , subgroup 가 (Table 5). [4,5]. Sakita [6] 가 10% 가 [7]

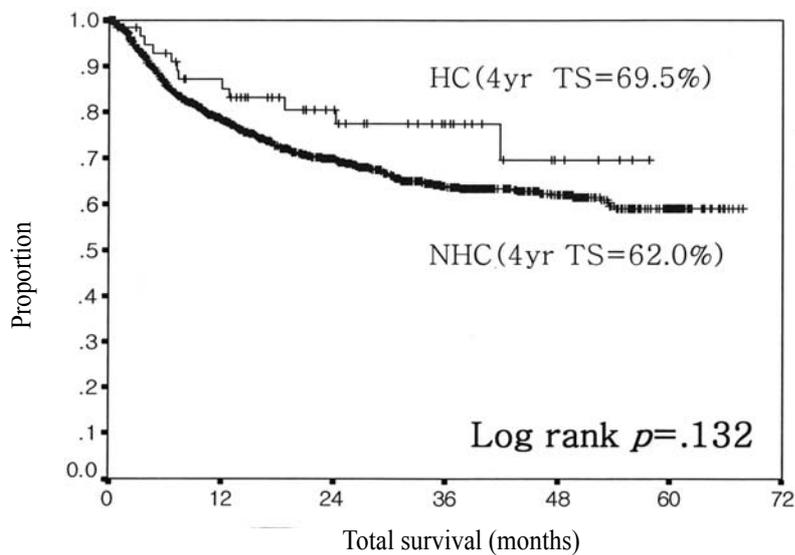


Fig.1. Kaplan-Meier survival curve in patient of health (HC) and non-health (NHC) screening centers.

Table 5. Cox regression analysis

		Univariate			Multivariate		
		RR	95% CI	CI	RR	95% CI	CI
Tumor	size	1.229	1.173	1.287	1.037	0.974	1.104
Stage	1b	3.208	1.667	6.172	1.604	0.677	3.802
	2	3.718	1.961	7.048	1.875	0.830	4.236
	3a	9.401	5.475	16.144	6.627	3.553	12.361
	3b	14.298	8.246	24.792	9.821	5.020	19.214
	4	56.313	34.162	92.828	28.991	15.161	55.437
Age		1.033	1.024	1.042	1.027	1.012	1.042

RR: relative risk; CI: confidence interval.

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