TECHNICAL REPORT 22-72 業績報告書

# FREQUENCY OF GASTROINTESTINAL AND PSYCHOGENIC COMPLAINTS AMONG ACHLORHYDRIC SUBJECTS

A MODIFIED CORNELL MEDICAL INDEX BY USE OF QUESTIONNAIRE, HIROSHIMA

無酸症患者における消化器系ならびに心因性愁訴の発現率 改訂 Cornell Medical Index 質問票による調査、広島

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ATOMIC BOMB CASUALTY COMMISSION

国立予防衛生研究所-原爆傷害調査委員会

JAPANESE NATIONAL INSTITUTE OF HEALTH OF THE MINISTRY OF HEALTH AND WELFARE

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ATOMIC BOMB CASUALTY COMMISSION HIROSHIMA AND NAGASAKI, JAPAN

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A MODIFIED CORNELL MEDICAL INDEX BY USE OF QUESTIONNAIRE, HIROSHIMA

展設症患者における消化器系ならびに心因性慈悲の発現率

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#### SUMMARY

A study was made of gastrointestinal and psychogenic symptoms among 200 ABCC-JNIH Adult Health Study members at Hiroshima (including 160 achlorhydric and 40 normal subjects) by the use of a self-administered questionnaire. The rate of symptoms among normal and achlorhydric subjects was analysed by sex and type of complaint.

Those aged 40 and over tended to have a higher rate of achlorhydria with increasing age. The rate of three complaints among females was statistically higher in the achlorhydric group than in the normal group, that is, 'loss of more than half of teeth,' 'loss of appetite,' and 'tendency to be constipated.' None of the psychogenic symptoms were significantly more frequent in the achlorhydric group than in the normal group. Some symptoms were less frequent in the achlorhydric group than in the normal group.

#### INTRODUCTION

The risk of stomach cancer has been reported to be significantly increased among persons found to have achlorhydria by test of gastric acidity. However, the relation between achlorhydria and organic disease of the stomach has not yet been established. Therefore, it was felt that a study of possible differences in the frequency of subjective symptoms

#### 要約

広島のABCC - 予研成人健康調査対象群中200名(無酸症160名,正常酸度者40名)について,自己記入方式質問票を用いて,消化器系および心因性愁訴の調査を行ない,正常酸度者および無酸症対象者における愁訴の発現率を,性別および質問項目別に解析した.

40歳以上の者では年齢の増加とともに無酸症の発現率が高い傾向が認められた。正常酸度群に比較して無酸症群において発現率が統計的に有意に高かった項目は、女子で「歯が半分以上抜けている」、「食欲がない」、「便秘の傾向がある」の3項目であった。心因的愁訴発現率については、無酸症群が正常酸度群より有意に高い率を示す項目はなく、若干の項目では無酸症群に正常酸度群よりも発現率が低いものを認めた。

#### 緒言

胃酸度検査により無酸症と判定された者における胃癌発生のリスクが有意に高いことが報告されている.<sup>1</sup> しかしながら、無酸症と胃の器質的疾患との関係は明らかでない.<sup>2</sup> したがって、無酸症者と正酸者との間に、自覚的愁訴の発現率に差異があるか否かを調査することは無

Keywords: Achlorhydria, Questionnaire Survey, Symptom

between achlorhydric and normal subjects may be helpful in determining the medical significance of achlorhydria. Thus, a study was made on the complaints of Adult Health Study<sup>3</sup> members in Hiroshima who had received two tests of gastric acidity because of suspected achlorhydria.

#### SUBJECTS AND METHOD

Among approximately 1070 Adult Health Study members who had their regular examination during the period of about 3 months from mid-June to mid-September 1971, 200 had achlorhydria or hypochlorhydria on the initial screening test<sup>2</sup> for gastric acidity and were selected for the present study. These 200 persons received a second test for gastric acidity, and 40 were ultimately found to be normal. These were used as controls.

The tests of gastric acidity were performed by the Department of Clinical Laboratories using Squibb Azuresin reagent. A color intensity of <0.6mg acid/300ml urine was used as the criteria for achlorhydria (including hypochlorhydria 0.3-0.6mg acid/300ml urine) and normal was >0.6mg acid/300ml urine (E.R. Squibb and Sons, Inc., 1969).

Information on complaints was obtained using a self-administered questionnaire (Appendix) based upon the Cornell Medical Index (CMI) as modified by Abe. 4

The difference in frequency of complaints between the normal and achlorhydric groups was examined by sex for the 28 questions under section D relating to gastrointestinal symptoms and the 51 questions under sections M-R relating to psychogenic symptoms involving mood and feeling.

#### RESULTS

#### Frequency of Achlorhydria by Sex and Age

The frequency of achlorhydria is shown by sex and age in Table 1. Achlorhydria was found in 52 or 86.7% of 60 males and in 108 or 77.1% of 140 females. Examination by age excluding the two persons under age 30 showed a tendency for the rate of achlorhydria to increase with age.

#### Frequency of Gastrointestinal Symptoms

The frequency of the 28 gastrointestinal symptoms among the normal and achlorhydric groups is compared by sex in Table 2. A statistically

酸症の医学的意義をみいだすために有益ではないかと考えられる。そこで、広島の成人健康調査3対象中無酸症の疑いにより2回の胃酸度測定を受けた者に対し、愁訴の調査を行なった。

#### 調査対象ならびに調査方法

1971年6月中旬から9月中旬までの約3か月間に定期検診を受けた成人健康調査対象者約1070名中,初回胃酸スクリーニング検査2で無酸症または低酸症のあった者200名を本調査の対象として選んだ。この200名のうち第2次胃酸検査で正常酸度者と最終的に分類された40名を対照群とした。

酸度検査は Squibb Azuresin 試薬を使用して臨床検査部で行なった. 色調度基準としては, 尿 300 ml 当たりの酸 0.6 mg未満を無酸症(0.3 - 0.6 mgを低酸症を含む), 0.6 mg以上を正常とした(E.R. Squibb and Sons 社, 1969年).

愁訴の調査にあたっては、Cornell Medical Index (CMI)を阿部ら 4 が改訂した自己記入方式質問書 (付録)を用いて愁訴の有無を調べた。

正常酸度群と無酸症群との愁訴発現率の差をみるために, D項目の消化器系愁訴28間とM-R項目の気分と感情に 関する心因性愁訴51間について,性別に比較検討した.

#### 調査成績

#### 性別年齢別にみた無酸症発現率

表1には,性別,年齢別にみた無酸症発現率を示した. 無酸症は男子60名中52名(86.7%),女子140名中108名(77.1%)に認められた.年齢別にみると,30歳未満の2名を除けば,年齢が高いほど無酸症発現率が増加する傾向が認められた.

#### 消化器系愁訴発現率

消化器系愁訴28項目についての愁訴発現率を性別および 正常酸度・無酸症群別に比較した(表2).正常酸度群と

TABLE 1 DISTRIBUTION OF NORMAL AND ACHLORHYDRIC SUBJECTS BY SEX AND AGE 表 1 正常酸度群および無酸症群の性別・年齢別分布

A 1 4 F	-14	Male 男						Female 女						Total #†					
Age 年齢	Nor 正常			orhydria 無酸		tal †	Nor 正常	mal 酸度		rhydria 《酸		otal	Nor 正常	mal 酸度		rhydria 兵酸	Tot		
to 6 E	No.	%	No	. %	No.	. %	No.	%	No	. %	No	. %	No.	%	No.	. %	No.	%	
20-29	0		1	100	1	100	0	353	1	100.0	1	100	0	0.	2	100	2	100	
30-39	1	14.0	6	86.0	7	100	4	30.6	9	69.4	13	100	5	25.0	15	75.0	20	100	
40-49	4	23.5	13	76.5	17	100	15	29.4	36	70.6	51	100	19	28.0	49	72.0	68	100	
50-59	1	8.3	11	91.7	12	100	8	18.1	36	81.9	44	100	9	16.0	47	84.0	56	100	
60-69	1	7.7	12	92.3	13	100	5	27.8	13	72.2	18	100	6	19.3	25	80.7	31	100	
70-79	1	11.1	8	88.9	9	100	0		12	100.0	12	100	1	4.7	20	95.3	21	100	
80-89	0		1	100.0	1	100	0		1	100.0	1	100	0	2	2	100.0	2	100	
Total 合計	8	13.3	52	86.7	60	100	32	22.9	108	77.1	140	100	40	20.0	160	80.0	200	100	

TABLE 2 RATE (%) OF GASTROINTESTINAL SYMPTOMS ON CMI AMONG NORMAL AND ACHLORHYDRIC SUBJECTS BY SEX 表 2 正常酸度群および無酸症群における CMI による消化器系愁訴の性別発現率

D complaint	Male 男 (8) (52)					Test*	(3	Fem 32)	Test*		
No. D愁訴番号		rmal は酸度	Achlorhydria 無酸		有意差のテスト		rmal 酸度	Achlorhydria 無酸		有意差のテスト	
	No.	%	No.	%			No.	%	No.	%	Daniel Sunt
41	2	25.0	20	38.5			8	25.0	47	43.6	Sugg.
42	0	In a n	13	25.0			13	40.6	37	34.2	
43	0		3	5.8			6	18.8	16	14.8	
44	3	37.5	11	21.2			1	3.1	14	12.9	
45	1	12.5	7	13.4			1	3.1	23	21.3	trig bennon an
46	0		7	13.4			10	31.3	33	30.6	
47	2	25.0	27	52.0			16	50.0	47	43.6	
48	3	37.5	16	30.8			11	34.4	39	36.1	
48'	2	25.0	7	13.4			8	25.0	23	21.3	
49	2	25.0	5	9.6			6	18.8	25	23.2	
50	2	25.0	6	11.5			6	18.8	15	13.9	
50'	4	50.0	11	21.2			9	28.1	33	30.6	
51	2	25.0	12	23.1			10	31.3	31	28.7	
51'	1	12.5	9	17.3			3	9.4	20	18.5	
52	2	25.0	6	11.5			4	12.5	23	21.3	
53	3	37.5	7	13.4			3	9.4	23	21.3	
54	3	37.5	10	19.3			8	25.0	26	24.0	
55	2	25.0	9	17.3			13	40.6	37	34.2	
56	5	62.5	9	17.3		* 3to	7	21.9	10	9.3	
56'	2	25.0	8	15.4			10	31.3	22	20.4	
57	5	62.5	12	23.1		Sugg.	6	18.8	11	10.2	
58	1	12.5	4	7.7		-	1	3.1	8	7.4	
58'	3	37.5	10	19.3			2	6.3	7	8.3	
59	3	37.5	17	32.7			10	31.3	33	30.6	
60	3	37.5	15	28.8			9	28.1	52	48.1	Sugg.
61	4	50.0	21	40.4			12	37.5	48	44.4	
62	3	37.5	11	21.2			6	18.8	22	20.4	
63	3	37.5	7	13.4			10	31.3	21	19.5	

<sup>\*:</sup> P<.05 Sugg: P<.10 Blank = NS P>.10

significant or suggestive difference in rate of complaints was noted between the normal and achlorhydric groups for five questions. Among males, the rate for two questions, that is, question number 56: 'Have you ever been told you have ulcer of the stomach or duodenum?' and question number 57: 'Do you suffer from frequent loose bowel movements?' was higher in the normal group than in the achlorhydric group. Among females, the rate of complaints was higher in the achlorhydric group than in the normal group for three questions, that is, question number 41: 'Have you lost more than half your teeth?,' question number 45: 'Is your appetite poor?' and question number 60: 'Do you frequently have constipation?'

# Frequency of Psychogenic Symptoms Involving Mood and Feeling

The frequency of psychogenic symptoms among the normal and achlorhydric groups as based upon the 51 questions under sections M-R is compared by sex in Table 3.

A suggestive difference in rate was noted between the two groups with regard to three questions, that is, question number 151: 'Do unfamiliar persons or places bother you?' question number 177: 'Are you always misunderstood by others?' and question number 195: 'Do you frequently break out into cold sweat?' There was a tendency in the females for these complaints to be fewer among the achlorhydric group than in the normal group.

In accordance with the method used by Abe et al<sup>4</sup> in their study, all complaints under sections M-R were combined for a comparison of the frequency in Table 4. In general, the proportion of those with 11 or more complaints under sections M-R was higher in the normal group than in the achlorhydric group in both males and females, but the difference is not statistically significant.

#### DISCUSSION

The CMI questionnaire was used in this study of complaints among achlorhydric subjects in the hope that the findings may be useful in providing nursing care.

The present study of complaints was made on 200 subjects who had been suspected of having abnormalities because of abnormal screening tests of gastric acidity so that certain biases are present in this sample. On retesting 80% in this study sample were abnormal. No subjects with initially normal findings were studied.

無酸症群との間に愁訴発現率の統計的な有意差が認められ、あるいは示唆されたのは5項目であった。男子では、二つの質問すなわち、質問56「医者に胃または十二指腸潰瘍があるといわれたか」、質問57「下痢をよくするか」の2項目が無酸症群よりも正常酸度群のほうに愁訴発現率が高かった。女子では、質問41「歯が半分以上抜けているか」、質問45「食欲がないか」、質問60「便秘の傾向があるか」の3項目で、無酸症群のほうに正常酸度群よりも愁訴の発現率が高かった。

#### 気分と感情に関する心因的愁訴発現率の比較

MからRまでの心因的愁訴51間について性別および正常 酸度・無酸症群別に愁訴発現率を比較した(表3).

愁訴発現率について両群間に有意差が示唆されたのは、質問 151「見知らぬ人や場所が気にかかるか」、質問 177「人からいつも誤解されるか」、質問 195「突然冷汗の出ることがあるか」の 3 項目で、女子で無酸症群のほうが正常酸度群よりもこれらの愁訴発現率が低い傾向を示した.

表 4 では、阿部らの研究 4 を参照し、M-Rの愁訴全体について愁訴発現率の比較をした。一般に男女とも正常酸度群のほうが無酸症群に比較してM-R 愁訴11以上のものの比率は高かったが、統計的に有意の差は認められなかった。

#### 老 窓

CMI 質問票を用いて無酸症患者の愁訴の発現状況を調べ nursing care に導入したい希望のもとにこの調査を行なった.

今回は愁訴の調査は胃酸度スクリーニング検査で異常の疑いのある者 200 名を選んだので、対象にはある種の偏りがある. 再検査では、本調査対象の80%に引き続き異常が認められた. 第1回検査が正常であった者の再検査は行なわなかった.

TABLE 3 RATE (%) OF SYMPTOMS UNDER SECTIONS M-R OF CMI AMONG NORMAL AND ACHLORHYDRIC SUBJECTS 表 3 正常酸度群および無酸症群における CMI による M項ーR項の愁訴の性別発現率

M-R	(8		e 男 (52	)	- Test *	(3	Fema 2)	Toot*		
complaint no. M-R 愁訴番号		mal 酸度	Achlorhydria 無酸		有意差のテスト	Normal 正常酸度		Achlorhydria 無酸		Test* 有意差のテス
	No.	%	No.	%	27n	No.	%	No.	%	158
M145	1	12.5	7	13.5		12	40.6	24	22.1	981
146	0	93	11	21.1		10	31.2	22	21.9	
147	1	12.5	2	3.8		6	18.8	19	17.6	
148	2	25.0	6	11.5		8	25.0	46	3.7	
149	1	12.5	11	21.1		8	25.0	28	25.9	
150	0	-	1	1.9		4	12.5	10	9.4	
151	0	2	9	17.3		11	34.4	20	18.5	Sugg.
152	0		0			3	9.4	8	6.0	want in
153	1	12.5	10	19.4		11	34.4	27	25.0	
154	1	12.5	10	19.4		8	25.0	38	35.1	
155	1	12.5	6	11.5		12	42.6	26	24.1	
156	0		7	13.5		6	18.8	13	12.1	
N157	0		3	5.8		4	12.5	9	8.3	
158	0		4	7.7		0	10 10 1	6	1.8	
159	0	2	1	1.9		4	12.5	19	17.6	
160	0		2	3.8	75 JR 1000	1	3.1	4	3.7	
161	0		3	5.8	THE TO LL	1	3.1	8	6.0	
162	0	11.	1	1.9		2	6.3	11	10.9	
O163	0		6	11.5		4	12.5	18	16.7	
164	1	12.5	5	9.6		5	15.6	9	8.3	
165	2	25.0	13	25.0		14	43.8	57	52.8	
166	2	25.0	6	11.5		5	15.6	33	30.3	
167	1	12.5	5	9.6		7	21.8	24	22.1	
168	1	12.5	3	5.8		1	3.1	4	3.7	
169	0	•	2	3.8		2	6.3	9	8.3	
170	0		0	-		1	3.1	0		
171	0		2	3.8		1	3.1	6	5.6	
D172	1	12.5	5	9.6		6	18.8	17	15.7	
173	0	X 7. 1	0			3	7.4	12	11.1	
174	3	37.4	9	17.3		10	31.2	29	26.9	
175	2	25.0	8	15.4		11	34.4	28	25.9	
176	2	25.0	12	23.1		2	6.3	8	6.0	
177	1	12.5	2	3.8		5	15.6	3	2.8	*
178	0	99.3	13	25.0		7	21.8	24	22.1	
179	4	50.0	13	25.0		10	31.2	33	30.3	
180	1	12.5	15	28.9		8	25.0	30	27.8	
181	0		2	3.8		1	3.1	9	8.3	
182	2	25.0	13	25.0		6	18.8	32	29.6	
183	2	25.0	12	23.1		6	18.8	26	24.1	
184	0		12	23.1		5	15.6	21		
185	1	12.5	14	27.0		4		26	24.1	
186	4	50.0	14	27.0			43.8	42	38.9	

all our subjects had mehlorhydnia

TABLE 3 CONTINUED 表 3 続き

M-R		Male	男				Fema				
complaint no.	(3	8)	(52)		Test*	(3	(2)	(10	08)	Test*	
M-R 愁訴番号	Normal 正常酸度		Achlorhydria 無酸		有意差のテスト	Normal 正常酸度		Achlorhydria 無酸		有意差のテス	
"test"	No.	%	No.	%	7000	No.	%	No.	%	.on Jawigmas	
R187	0		4	7.7		0		8	6.0		
188	0		5	9.6		2	6.3	10	9.3		
189	1	12.5	6	11.5		8	25.0	31	28.9		
190	1	12.5	1	1.9		7	21.8	29	26.9		
191	0	*	3	5.8		3	9.4	11	10.9		
192	0		6	11.5		5	15.6	31	28.9		
193	0	- 102	2	3.8		0		2	1.9		
194	0		1	1.9		0		3	2.8		
195	0	ė na	3	5.8		7	21.8	9	8.3	Sugg.	

<sup>\*:</sup> P<.05 Sugg 示唆的: P<.10 Blank 空欄 -NS P>.10

TABLE 4 RATE (%) OF SYMPTOMS UNDER SECTIONS M-R OF CMI AMONG NORMAL AND ACHLORHYDRIC SUBJECTS BY SEX

表4 正常酸度群および無酸症群におけるCMIによるM項-R項の愁訴の性別発現率

-	19 17.8	REFE	Symptom:	5 病	状	1	0 031
		<11 M-R 愁			more M-R 愁訴11以上	Total 計	Test 有意差のテスト
	7.81 81	No.	%	No.	%		0 (8)
THE	Normal 正常酸度	6	75	2	25	8	X2 [1]001
	Achlorhydria 無酸	43	82.7	9	17.3	52	P>.05 N.S.
-tr	Normal 正常酸度	21	65.7	11	34.3	32	$\chi^2$ [1] = .086
	Achlorhydria 無酸	76	70.4	32	29.6	108	P>.05 N.S.

This investigation of the frequency of gastrointestinal and psychogenic symptoms using the CMI questionnaire seemed to suggest the following. It may be of medical significance that, while the rate of psychogenic symptoms was lower in the achlorhydric group than in the normal group, gastrointestinal symptoms such as constipation and loss of appetite tended to be higher in the achlorhydric group among females. The larger number of subjects who had answered that they had 'lost more than half their teeth' in the achlorhydric group may perhaps be due to the relatively higher age distribution of this group.

Prior to this study, it had been anticipated that the frequency of organic or psychogenic complaints would be higher in the achlorhydric group, but the results suggest rather a tendency to the contrary. We recognize that all our subjects had achlorhydria on a screening examination. Further studies which include persons with normal Diagnex Blue test results are desirable for comparison with the present findings.

CMIによる消化器系と心因性との愁訴の発現率に関する今回の検討によって次のようなことが考えられる.無酸症群は正常酸度群よりも心因性愁訴発現率が低いが、消化器系の愁訴で、便秘や食欲不振の愁訴が無酸症群の女子に高率にみられる傾向を示したことは、医学的に意義があるかもしれない.無酸症群において「歯が半分以上抜けている」という回答が多いのはこの群の年齢分布が相対的に高いことによるものであろう.

本調査開始前においては、無酸症群ではなんらかの器質的あるいは心因的愁訴が多いのではないかと予想していたが、調査の結果ではむしろ逆の傾向が示唆された.今回の調査対象の全員は、スクリーニング検査で無酸症を呈した者であったので、Diagnex Blue 検査結果が正常である者を含む調査をさらに行なって今回の所見との比較が行なわれることが望ましい.

Achlorhydric subjects often have no demonstrable organic disease and the medical significance of achlorhydria is still obscure, but the findings of the present study do not indicate that psychogenic complaints are more frequent among achlorhydric subjects. Hence, no corroboration could be obtained for the assumption 5 that the etiology of achlorhydria may include psychogenic factors with the possible need for psychiatric management. Furthermore, special consideration is required in the outpatient clinic in recommending tests of gastric acidity for those who complain of loss of appetite and constipation because of the greater possibility of achlorhydria among such persons.

無酸症では器質的疾患の証明されない場合が多いことからみて、その医学的意義はまだ明らかでないが、今回の結果からみて心因的な愁訴が無酸症に多いことは考えがたいように思われる。したがって、無酸症の原因の中に心因性のものがあり精神面での管理を必要とするのではないかとの推測 5 を裏づけることはできなかった。なお、外来において胃酸度検査を勧めるにあたっては、食欲不振や便秘を訴える者には無酸症の疑いがあることを考慮し、特別な配慮が必要だと考えられる。

APPENDIX: SELF-ADMINISTERED MEDICAL HISTORY\* 付録: 病歷質問書 \*

- D. Digestive system (28 questions) 消化器系(28間)
- 41. Have you lost more than half your teeth? 歯は半分以上ぬけていますか
- 42. Do you have bleeding gums? 歯ぐきから血がでますか
- 43. Do you frequently have severe toothache? ひどい歯の痛みがよくありますか
- 44. Is your tongue always white and rough? 舌がいつも真白でざらざらしていますか
- 45. Do you have poor appetite? いつも食欲がないですか
- 46. Do you frequently eat between meals? よく間食しますか
- 47. Do you chew your food well? いつもご飯をよくかんでのみくだしますか
- 48. Do you frequently suffer from upset stomach? よく胃をこわしますか
- 48. Do you suffer from nausea or vomiting? はきけがあったり, はいたりしますか
- 49. Do you have heavy sensation of stomach after meals? 食後いつもおなかがもたれますか
- 50. Do you feel bloated after meals? 食後よくゲップがでますか
- 50. Do you suffer from heartburn or bring up acid? むねやけがあったりすっぱいものが上ったりしますか

<sup>\*</sup> Numbers correspond to CMI questionnaire as modified by Abe 4 数字は阿部 4 が改訂した CMI 質問票の番号と一致する.

- 51. Do you suffer from stomach trouble? Property of the prop
  - 51. Do you have much likes and dislikes in food? 偏食がひどいですか
  - 52. Do you suffer from indigestion? 消化がわるくてこまりますか
  - 53. Do you ever have sharp pains of the stomach? さしこむようにおなかが縮むことがありますか
  - 54. Does your stomach always feel bad? いつも胃の具合がわるいですか
  - 55. Does stomach trouble run in the family? 家族に胃のわるい人がいますか
  - 56. Have you ever been told you have ulcer of the stomach or duodenum? 医者に胃潰瘍か十二指腸潰瘍があるといわれたことがありますか
  - 56. Do you have pains of the stomach after meals or when you are hungry? 食事のあとか,空腹の時に胃が痛みますか
  - 57. Do you suffer from frequent loose bowel movements? よく下痢をしますか
  - 58. Have you ever had severe bloody diarrhea? 血のまじったひどい下痢をしたことがありますか
  - 58°. Do you sometimes have mucus in your stools? 時々便に粘液がでますか
  - 59. Have you ever had intestinal parasites? 寄生虫のいたことがありますか
  - 60. Do you frequently have constipation? よく便秘しますか
  - 61. Do you have rectal hemorrhoids? 痔をわずらったことがありますか
  - Have you ever had jaundice (yellow eyes and skin)?
     黄疸(ひふや目が黄色くなる)になったことがありますか
  - 63. Have you ever had liver or gall bladder trouble? 肝ぞうや胆のうの病気になったことがありますか

#### M. Inadequacy (12 questions) 不適合(12問)

- 145. Do you sweat or tremble during tests or when asked a question? 試験の時や質問の時に汗をかいたり, ふるえたりしますか
- 146. Do you become tense and tremble when your boss approaches you? 目上の人が近づくととても緊張してふるえそうになりますか
- 147. Are you unable to work when being watched by your boss? 目上の人が見ていると仕事がさっぱりできなくなりますか
- 148. Do you become confused when you must work fast?
  物事をいそいでしなければならない時には頭が混乱しますか
- 149. Do you tend to make mistakes when you work fast?

  少しでも急ぐと誤りをしやすいですか
- 150. Do you frequently misunderstand instructions or orders? いつも指図や命令をとり違えますか

- 151. Do unfamiliar persons or places bother you? 見知らぬ人や場所が気にかかりますか
- 152. Do you feel uneasy unless someone familiar is nearby? そばに知った人がいないとおどおどしますか
- 153. Do you have difficulty in making decisions? いっも決心がつきかねますか
- 154. Do you always need someone nearby to consult with? いつも相談相手がそばにいてほしいですか
- 155. Do you think that other persons feel you are unresourseful? 人から気がきかないと思われていますか
- 156. Do you feel uneasy when eating in unfamiliar places? よそで食事をするのが苦になりますか

## N. Depression (6 questions) 憂うつ(6間)

- 157. Do you feel lonely and sad in a crowd? 会合に出ても一人ぽっちな感じがして悲しいですか
- 158. Do you always feel unhappy and depressed? いつも不幸で憂うつですか
- 159. Do you cry easily? よく泣きますか
- よく泣きますか

  160. Do you always feel miserable and downcast?
  いつもみじめで気が浮かないですか
- 161. Do you feel that there is no hope in life? 人生は全く希望がないように思われますか
- 162. Do you sometimes feel that you want to die? いっそ死んでしまいたいと思うことがありますか

## O. Anxiety (9 questions) 不安(9問)

- 163. Do you worry all the time? MA MAN (Amotherop Of notemal) All いつもくよくよしますか (aldman or bear any od . 73)
- 164. Does anyone in your family worry a great deal? 家族にくよくよする人がいますか
- 165. Do even trivial things bother you? ちょっとしたことでも気になって仕方ないですか
- 166. Have you ever been told you are nervous? 人から神経質だと思われていますか
- 167. Is there anyone who is nervous in your family? 家族に神経質な人がいますか
- 168. Have you ever had severe neurosis? ひどい神経症(ノイローゼ)になったことがありますか
- 169. Has anyone in your family had severe neurosis? 家族にひどい神経症になった人がいますか
- 170. Have you ever been admitted to a mental institute? 精神病院に入院したことがありますか
- 171. Has anyone in your family ever been admitted to a mental institute? 家族の誰れかが精神病院に入院したことがありますか

### P. Sensitivity (6 questions) 過敏(6問)

- 172. Are you very bashful or sensitive? ひどいはにかみやあるいは神経過敏なたちですか
- 173. Is anyone in your family very bashful or sensitive? 家族にはひどいはにかみや神経過敏な人がいますか
- 174. Are your feelings hurt very easily? 感情を害しやすいですか
- 175. Are you disturbed when criticised by someone? 人から批判されるとすぐ心が乱れますか
- 176. Do you think that others feel that you are difficult? 人から気むづかしがりやと思われていますか
- 177. Are you always misunderstood by others?

  人からいつも誤解されますか
- Q. Anger (9 questions) 怒り(9問)
- 178. Are you suspicious even of your friends? 友人にも気を許さないですか
- 179. Do you become restless when you make up your mind to do something? 仕事をしようと思ったらいてもたってもおれなくなりますか
- 180. Do you easily lose your temper or become irritable? すぐカーとなったり、いらいらしたりしますか
- 181. Do you easily lose control of yourself unless you are careful? いつも緊張していないとすぐ取り乱しますか
- 182. Do trivial matters irritate you and make you angry? ちょっとしたことが勘にさわって腹が立ちますか
- 183. Do you become angry when ordered by anyone? 人から指図されると腹が立ちますか
- 184. Do you become irritable when interfered by anyone? 人から邪魔されていらいらしますか
- 185. Do you easily lose your temper when things do not go as you wish? 自分の思うようにならないとすぐカーとなりますか
- 186. Do you ever get very angry?
  ひどく腹を立てることがありますか
- R. Tension (9 questions) 緊張(9問)
- 187. Do you tend to tremble? よく体がふるえますか
- 188. Are you always tense and uneasy? いつも緊張していらいらしていますか
- 189. Do sudden sounds startle you or cause you to tremble? 急な物音で飛上るように驚いたりふるえたりしますか
- 190. Do you cower when bawled out by anyone? どなりつけられるとすくんでしまいますか
- 191. Do you frequently hear sudden sounds at night? 夜中急に物音がしたりすることがよくありますか
- 192. Are you frequently awakened by nightmares? 恐ろしい夢で目のさめることがよくありますか
- 193. Do you always think of something fearful? 何か恐ろしい考えがいつも頭に浮んできますか
- 194. Do you frequently get terror-strickened for no apparent reason? よく何んのわけもなく急におびえたりしますか
- 195. Do you frequently suddenly break out into cold sweat? 突然冷汗のでることがよくありますか

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