

Anxiety and specific
structure of worries
of patients
who undergo
abdominal surgery

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[Purpose]

The purpose of this study is exploratory demonstration of the structure of more abstract anxiety, by focusing on worries that cause the anxiety state of patients who undergo abdominal surgery including the digestive system disease and by clarifying the specific details of worries and their interrelation



[Method]

The participants consisted of 103 patients who underwent surgeries at Ward B of a University hospital; average age: 59.6 years old, 66 males and 37 females.

Table 1 Subject characteristics

n=103

		no malignancy (n=34)		malignancy(n=69)		
		mean/number	(SD)%	mean/number	(SD)%	<i>p</i>
Age(years)		52.1	12.2	63.3	11.3	<i>p</i> <.005
Sex	Male	20		46		
	Female	14		23		
operation	laparotomy	9		42		
	endoscope	25		27		<i>p</i> <.005
Disease	Gallstone胆石 : 25	Colon大腸 /rectum直腸 cancer : 31				
	Other : 9	Gastric cancer胃癌 : 25				
		Esophageal cancer食道癌 : 5				
		Other : 7				5

[Ethical consideration]

This study was approved by the hospital and conducted with participants' consent and the ethical standards.

[Results ①]

hardly:1,often:2,
frequently:3,always:4

Table 2 BEFORE SURGERY — WORRIES

	Patient	Mean	SD
1 Feel apprehension as to the result of the surgery	103	2.11 ± .82	
2 Concerned about physical discomfort after the surgery	103	2.35 ± .88	
3 Have acquired information on the surgery*	100	2.46 ± 1.06	
4 Worried about financial aspect where surgery and hospitalization are concerned	99	1.76 ± .87	
5 Worried about family where surgery and hospitalization are concerned	102	2.16 ± .99	
6 Feel anxious regarding job during hospitalization	103	2.00 ± 1.11	
7 Concerned about changes to physical condition because of the surgery (wounds, having tubes inserted etc)	101	2.23 ± .95	
8 Satisfied with the medical staff*	98	1.67 ± .89	
9 Feel irritated by the change in environment caused by hospitalization	103	1.57 ± .79	
10 Feel anxious regarding current physical pain	101	1.59 ± .81	
11 Mentally prepared for the anesthetic*	99	2.31 ± 1.16	
12 Worried about post-surgery treatment	103	2.08 ± .93	
13 Mentally prepared for the surgery*	103	2.10 ± 1.10	

* Inverted items

Table 2

AFTER SURGERY :WORRIES

		N	Mean	SD
1	Satisfied with the result of the surgery*	99	1.32 ±	.47
2	Worried about returning to work after leaving hospital	102	1.47 ±	.51
3	Feel anxious regarding current physical condition	103	1.62 ±	.49
4	Worried about diet and eating habits after leaving the hospital	103	1.67 ±	.47
5	Satisfied with the medical staff*	102	1.30 ±	.45
6	Worried about family matters after leaving the hospital	103	1.16 ±	.36
7	Feel irritated by the current in-hospital environment	103	1.38 ±	.49
8	Feel confident of gradually readjusting to society after leaving hospital*	101	1.56 ±	.50
9	Feel like sufficient sleep is attained*	103	1.67 ±	.47
10	Feel happy to be able to talk to other people*	103	1.63 ±	.48
11	Worried about financial situation after leaving the hospital	102	1.37 ±	.49
12	Feel anxious about daily life (appearance / dress etc) after leaving hospital	103	1.33 ±	.47
13	Feel confident about daily life (appearance / dress etc) at the present time*	103	1.58 ±	.50
14	Feel like lacking in strength at the present time	102	1.77 ±	.43
15	Feel hope toward the future due to having the surgery*	103	1.55 ±	.50

[Results ②]

1) The scale point of worries after surgery had correlation with worries to the social life after hospital discharge ($r = .059$, $p < .001$) and the daily life after hospital discharge ($r = .057$, $p < .001$), suggesting the necessity of support with expanded views to reconstruct the life after hospital discharge.

[Results ③]

- As a result of MDS (Multi-Dimensional Scaling) interpretation in reference to the cluster analysis in order to understand similarities among each item of worries before and after surgery and their structure, they were successfully categorized into five:

① satisfaction to responses, ② current worries,
③ mental preparedness,
④ worries to results, and ⑤ worries about relationship after surgery.

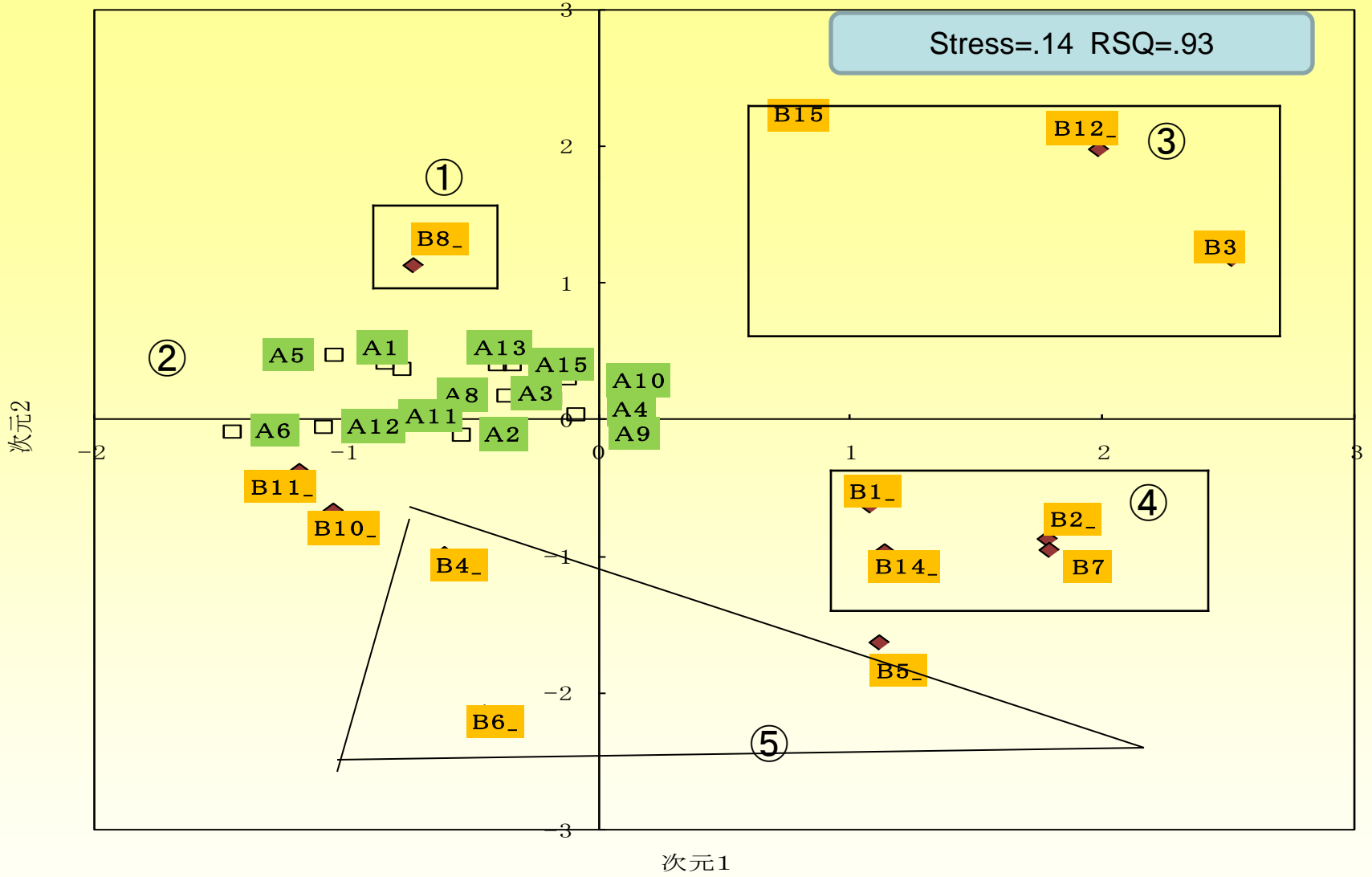


Fig 1. Result of MDS (Multi-Dimensional Scaling)

BEFORE SURGERY: WORRIES

1. Feel apprehension as to the result of the surgery
2. Concerned about physical discomfort after the surgery
3. Have acquired information on the surgery*
4. Worried about financial aspect where surgery and hospitalization are concerned
5. Worried about family where surgery and hospitalization are concerned
6. Feel anxious regarding job during hospitalization
7. Concerned about changes to physical condition because of the surgery (wounds, having tubes inserted etc)
8. Satisfied with the medical staff*
9. Feel irritated by the change in environment caused by hospitalization
10. Feel anxious regarding current physical pain
11. Mentally prepared for the anesthetic*
12. Worried about post-surgery treatment
13. Mentally prepared for the surgery*

AFTER SURGERY :WORRIES

1. Satisfied with the result of the surgery*
2. Worried about returning to work after leaving hospital
3. Feel anxious regarding current physical condition
4. Worried about diet and eating habits after leaving the hospital
5. Satisfied with the medical staff*
6. Worried about family matters after leaving the hospital
7. Feel irritated by the current in-hospital environment
8. Feel confident of gradually readjusting to society after leaving hospital*
9. Feel like sufficient sleep is attained*
10. Feel happy to be able to talk to other people*
11. Worried about financial situation after leaving the hospital
12. Feel anxious about daily life (appearance / dress etc) after leaving hospital
13. Feel confident about daily life (appearance / dress etc) at the present time*
14. Feel like lacking in strength at the present time
15. Feel hope toward the future due to having the surgery*

Results ③

In terms of relationship of worries with existence of malignant tumors, operative procedures, sex and age, the influence of age was found to be statistically significant.

[Conclusion]

The results suggest the importance of nursing for helping patients reduce worries and anxiety based on their needs and psychological states before and after surgery, including proper information of surgery and recovery process.