Fatigue and Psychological Distress in Patients with Gastrointestinal Stromal Tumors (GIST) Receiving Targeted Therapy

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INTRODUCTION

Gastrointestinal Stromal Tumors (GIST) is one of the rare cancers with increasing survival time due to the effective targeted therapy. However, long-term or lifetime use of tyrosine kinase inhibitors (TKIs) might cause physical and psychological distress.

PURPOSE

- The aims of this study were to examine
1. the current status of fatigue, anxiety and depression; and
 2. the relationship among fatigue, anxiety and depression in GIST patients with TKIs use (Glivec in this study).

METHOD

1. Design: A cross-sectional study.
2. Study Population: GIST patients treated with TKIs were recruited from surgical outpatient clinic at a medical center in northern Taiwan.
3. Measures:
 - 1) Fatigue Symptom Inventory (FSI).
 - 2) Hospital Anxiety and Depression Scale (HADS).
 - 3) Background Information Form (BIF).

RESULTS

- A total of 80 subjects were recruited.
1. The results including the mean scores of FSI and HADS are shown in Table 2.
 2. Patients with higher fatigue intensity and interference are significantly related to higher anxiety and depression (Table 3).

CONCLUSIONS

Although a relatively longer survival time than other cancer patients, GIST patients still experienced mild to moderate fatigue and psychological distress. Further interventions are suggested to help them handle fatigue, anxiety and depression.

Table 1. Background Information (N=80)

Variable	N (%) or Mean (SD)	
Age (years)	56.1 (12.1)	
Education (years)	12.9 (4.2)	
Gender		
Male	42	(52.5)
Female	38	(47.5)
Marital status		
Married	56	(70.0)
Single/Divorced/Widowed	24	(30.0)
Employment		
Employed	41	(51.3)
Unemployed/Retirement	39	(48.7)
Time since initial diagnosis (months)	46.8 (41.2)	
Location of Tumor		
Stomach	48	(60.0)
Non-Stomach	32	(40.0)
Operation		
Yes	72	(90.0)
No	8	(10.0)

Table 2. Results of FSI and HADS (N=80)

Measure	N (%) or Mean (SD)	
FSI		
Fatigue intensity	2.5	(1.9)
Fatigue interference	1.5	(1.8)
HADS- anxiety subscale	3.4	(3.8)
Non-cases (≤7 points)	65	(81.3)
Doubtful cases (8-10 points)	12	(15.0)
Clinical cases (≥11 points)	3	(3.8)
HADS- depression subscale	4.0	(3.7)
Non-cases (≤7 points)	68	(85.0)
Doubtful cases (8-10 points)	7	(8.8)
Clinical cases (≥11 points)	5	(6.3)

Note. The 14-item FSI is scored 0-10 (the higher, the worse). The HADS has anxiety and depression subscales. Each item is scored 0-3 with each subscale scoring 0-21 (the higher, the worse).

Table 3. Correlations Among FSI and HADS (N=80)

	(1)	(2)	(3)	(4)
(1) Fatigue intensity	1.00			
(2) Fatigue interference	.85 **	1.00		
(3) Anxiety	.43 **	.60 **	1.00	
(4) Depression	.42 **	.46 **	.64 **	1.00

Note: Spearman's correlation. *p<.05; **p<.01.

ACKNOWLEDGMENT

This study was supported by a grant from Ministry of Science and Technology (MOST), Taiwan.