



Original Article

Longitudinal Study on the Profiles of Symptom Distress and Functional Status in Gynecologic Cancer Patients Receiving Chemotherapy*

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1)

Abstract

Purpose: This study aimed to explore changes in symptom distress and functional status in gynecologic cancer patients during the entire treatment cycles of chemotherapy. **Methods:** A prospective and longitudinal study with repeated measures was designed. Symptom Distress Scale and Karnofsky Performance Status Index were included in a daily log developed for self-administration. A total of 39 patients with a mean age of 48.4 years participated. **Results:** The levels of symptom distress and functional status changed significantly over the six cycles. Symptom distress kept increasing until its peak at the fourth cycle, while the functional status scored lowest at the first cycle, then it improved as the cycle repeated. In each cycle, symptom distress was marked higher during the first 6 days accompanying poor functional status. However, both changes did not recover completely

until the end of each cycle. **Conclusion:** Nursing assessment and intervention need to be provided based on these changing patterns to help cancer patients cope and adjust successfully during the long treatment period. Further studies are needed to examine the impact of the major symptoms on psychological responses, quality of life, and outcomes of the cancer treatments.

Key words : Gynecologic cancer, Chemotherapy, Symptom distress, Functional status

15.2%

(KNSO, 2002).

가

*

(KRF-2003-003-E00261).

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6

1-5

3

가

5

가

(Chernecky, 1999; Williams, Wood, & Cunningham-Warburton, 1999).

가

가

(Chung, 1994; Song, Noh, & Han, 2000)

(Song, 1992),

(Suh, Park, & Park, 1994; Um, 1986),

(Choi, 1995) 가

가

(Ahn, 1996; Song & Shin,

1988) (Cha, 1991; Park & Shin, 1994)

가 (Chung, 1994; Song et

al., 2000)

1.

가

2.

(Berger & Higginbotham, 2000; Hoskins, 1997; John, 2001; Sarna, 1998),

2

가 가

Richardson, Ream Wilson-Barnett(1998) 28

, Berger Higginbotham(2000) 3 21

, McGuire (1993) 30 3.

가 (Daily

log)

1) Symptom Distress Scale(SDS)

13

(McCorkle & Young, 1978). Likert-type

1 ' ' 5 ' ' ,

가 가 .

Cronbach's alpha가 .82 ,

(McCorkle &

Young, 1978).

SDS 13

2

1 ,

coughing, breathing, outlook 3 ,

(Um, 1986),

outlook

가 11 55

Cronbach's alpha .82 .

2) Karnofsky

Performance Status Index(KPSI)

KPSI

0% () 100%() 10%

(Karnofsky, 1977).

95% Hyde, Wolf,

McCracken Yesner (1973) (cited in Dodd,

Miaskowski, & Paul, 2001) KPSI ,

가 ,

(Dodd et al.,

2001).

3) , , , ,

, , , ,

2) 2

21

가 가

1-2

3) 가 가 가

가

. 6 가

가 3

4) 6 5

5) 46 63

, 46

7

39 , ,

5.

(descriptive analysis)

, 6

Repeated measures

ANOVA

가

4.

48.4 (±9.40, 24-68) ,

50 40 가 46.2%(n=18), 28.2%(n=11)

1) 2

가

60 가 3

30 20

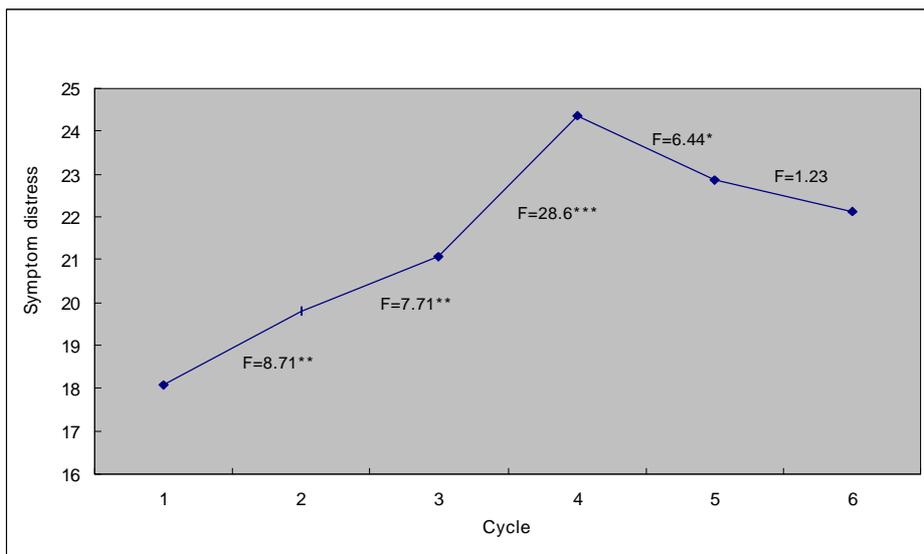
5 , 2 17.9%

87.2%(n=34)가 1가 , 가 5 Ifosfamide, Hycamtin .
 (17.9%) 2 2.
 , 1 .
 56.4%(n=22), 23.1%(n=9) , 1 6
 8 .
 3 2 (n=27) 가 . (F=21.17, p=.00)
 64.1%(n=25) 가 <Table 1>. 가 가
 17.8%(n=7), 12.8%(n=5) 1 3
 18.1, 19.8, 21.1
 I 가 30.8%(n=12), II 가 15.4% (n=6), 가 4 24.4
 III 가 43.6%(n=17) 가 , 4 가
 IV 10.3%(n=4) . <Figure 1>. 5, 6
 5 . 22.1
 3
 Taxol-Carboplatin 가 51.3%(n=20) 가 .
 Taxotere 가 12.5%(n=5), .
 Genexol 5-Fluorouracil repeated method <Figure 1>, 1 5
 가 4 Topotecan,

<Table 1> Repeated measures analyses of symptom distress and functional status over time

Variable	Cycle	1st	2nd	3rd	4th	5th	6th	Mean(SD)	F
Symptom distress		18.1(3.86)	19.8(4.72)	21.1(4.74)	24.4(5.72)	22.9(4.13)	22.1(4.93)		21.17*
Functional status		73.9(10.94)	79.3(9.97)	79.3(9.98)	81.3(9.11)	80.5(8.06)	83.0(9.50)		7.95*

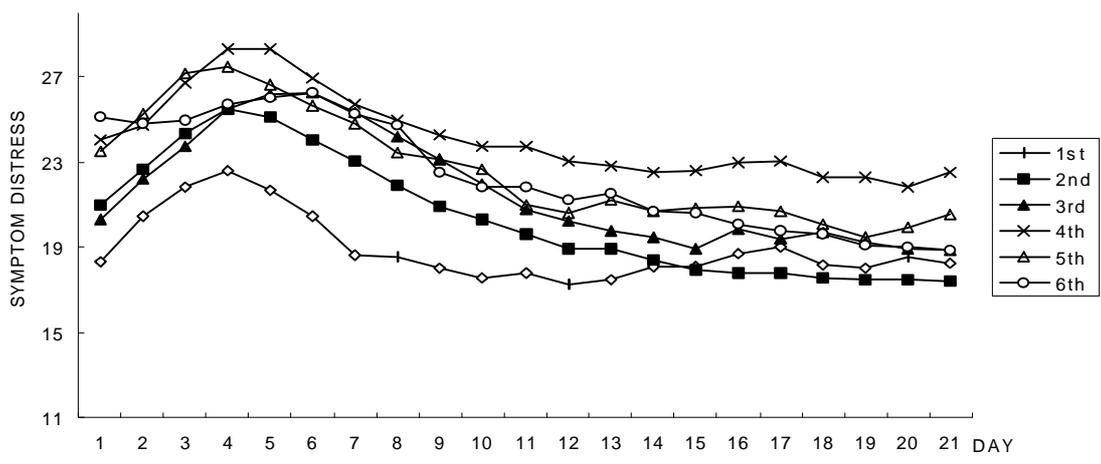
* p<.001



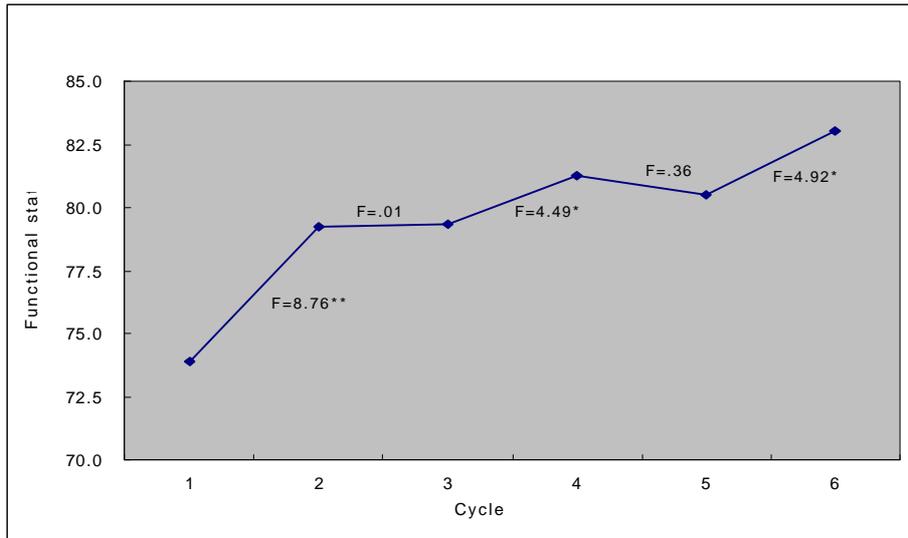
* p< .05; ** p<.01; *** p<.001

<Figure 1> Changes in symptom distress over 6 cycles

(F=28.6, p=.00). 가 가 3 4 (F=4.49, p=.04)
 4 5 5, 6 가
 (F=6.44, p=.02) 6 83% (F=4.92, p=.03) 6
 1 6 21 가
 <Figure 2>, 6 <Figure 4>, 3 6
 4, 6 가 67% 79% 가
 21 가 100% 가
 4, 5 가 가 1, 3, 14 가 1, 2, 3
 . 4 21 3 4
 6 8 5 가
 3. 21 가
 6 가
 (F= 가
 7.95, p=.00)<Table 1>. 가
 3>, repeated method <Figure 4> 가
 가 73.9% 가 가 2 가
 79.3% 가 (F=8.76, p=.005). 가 가
 3 가 4 6

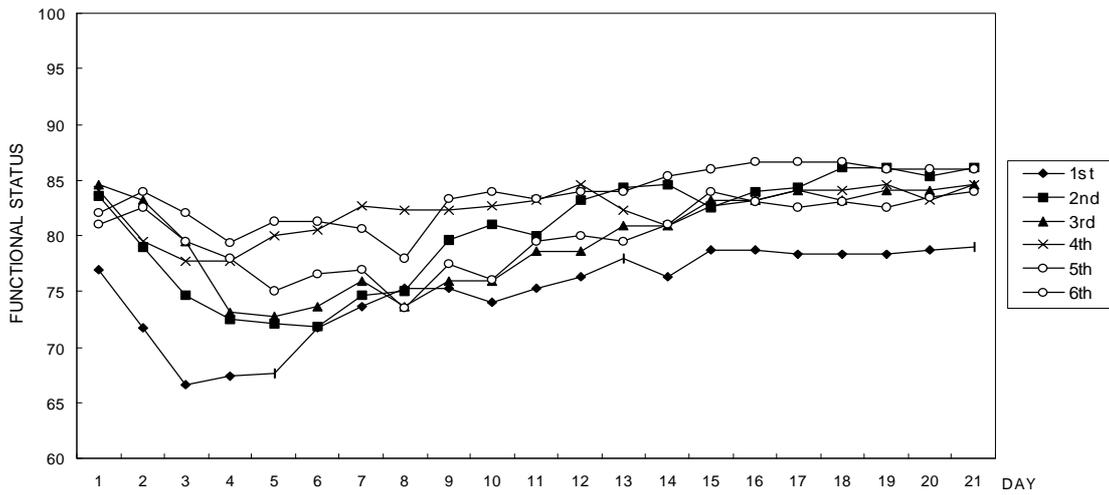


<Figure 2> Patterns of symptom distress for 21 days over 6 cycles



* $p < .05$; ** $P < .01$

<Figure 3> Changes in functional status over 6 cycles



<Figure 4> Patterns of functional status for 21 days over 6 cycles

가

가 -0.2

-27 ($p > .05$)

5-6

가

21

Chung(1994) Song (2000)

가

58

12(1), 2006 3

가 , 11
가 가
가
가 ,
가

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