Symptom Cluster in Women with Gynecologic Cancer

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Background

Early detection of cancer and development of medical treatment

Increase in survival ratio of cancer patients

Experience in variety of physical and psychological symptoms

Background

Physical Symptom
(Pain, Fatigue…)

Psychological Symptom
(Depression, Anxiety…)

Cancer Patients Symptom

Suffer from several symptoms as cluster
(Pain, Fatigue, Insomnia, Depression, Anxiety)

Background

Pain   Fatigue

Insomnia
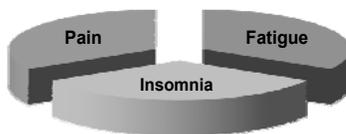
Symptom Cluster of Cancer Patients

- Assessing symptoms that can be appeared in cancer patients
  ⟹ Early medical treatment
- Early estimation and treatment on symptoms
  ⟹ Reduce medical cost
- No research regarding the cluster analysis for gynecologic cancer women

Overview

Purpose of study

- To find out prevalence, severity and interference of symptoms in women with gynecologic cancer
- To identify the symptom clusters among those symptoms

Definition

Gynecologic Cancer	Cancer in women's genital tract Cx Ca, Ov Ca, Em Ca
Symptom Cluster	Compose of at least two symptoms which are closely correlated but may not have a same origin

Literature review

Symptom Cluster

- Compose of at least two symptoms related to a disease and appear at the same time
- May not have same origin
- Strong correlation among symptoms
- Independency among clusters

Literature review 2

Symptom Cluster

Walsh & Rybicki (2006)	
Neurological Cluster	Anxiety-Depression-Insomnia
GI Cluster	Indigestion-abd fullness-belch
Pain Cluster	Pain-Constipation
Nausea Vomiting Cluster	Nausea-Vomiting
Fatigue Cluster	Fatigue – weakness – anorexia - Wt. loss - change of taste

Chen & Tseng(2006)	
Sickness Cluster	Pain-Fatigue-Insomnia-anorexia-drowsy
GI Cluster	Nausea-vomiting
Emotional Cluster	Discomfort-Sadness

Research methods

- Design of experiment: cross sectional survey

- Sampling

  184 patients among 986 patients who have received treatment or have been hospitalized in the OBGY during Jan.1, 2006 ~ Apr.30, 2006

Research methods 2

- 50 Symptoms of Gynecologic Cancer: 문항 작성

  - Memorial Symptom Assessment Scale
    32 Symptoms (Portenoy, 1994)
  - MD Anderson Symptom Inventory-Korean
    Version 13 symptoms (2006)
  - Koldjeski(2003) OV CA 24 symptoms(high level)

  * Cronbach's α : Severity of symptoms 0.93
              Degree of interference 0.93

Research methods 3

- Analysis : SPSS Version 12.0 program
  - 일반적 특성: 빈도, 백분율
  - 신체적, 정신적 증상 발현: 빈도, 백분율
  - 신체적, 정신적 증상강도와 불편감 정도: 평균, 표준편차
  - 증상 클러스터: 계층적 군집분석 기법을 이용한
              Cluster Analysis Method

Research Results

General characteristics

	Class	n (%)
Age	20-39	20(10.8)
	40-49	65(35.3)
	50-59	70(38.0)
	60-69	22(12.1)
	70-79	7(3.8)
Education	Elementary	7(3.5)
	Middle	21(11.4)
	High	74(40.2)
	Collage or above	49(26.63)
Occupation	yes	50(27.2)
	No	134(72.8)
Religion	Yes	150(81.5)
	No	34(18.5)

Research Results 2

Medical characteristics

	Class	n (%)
Diagnosis	Cx Ca	99(53.8)
	Ov Ca	51(27.7)
	Em Ca	34(18.5)
Stage (FIGO)	Stage I	112(60.9)
	Stage II	30(16.3)
	Stage III	36(19.6)
	Stage IV	6(3.3)
Recurrent	Yes	21(11.4)
	NO	163(88.6)
Treatment	OP	70(38.0)
	Chemo	2(1.1)
	OP+Chemo	52(28.3)
	OP+RT	26(14.1)
	Chemo+RT	14(7.6)
	OP+Chemo+RT	20(10.9)

Research Results 3

	Class	n (%)
ECOG Score	0	86(46.7)
	1	79(42.9)
	2	9(4.9)
	3	8(4.4)
	4	2(1.1)

	Mean	SD
Period after last treatment (Months)	31.20	31.51

Research Results 4

Prevalence, Severity and Interference of symptoms

	Prevalence	Severity	Interference
3 Items on Top	- Fatigue - Lack of concentration - Memory loss	- Vaginal dryness - Alopecia - Decreased sexual desire	- Vaginal dryness - Decreased Sexual desire - Alopecia

Research Results 5

	Clustering	Pearson's correlation
1	Appetite loss– taste change	1.000
2	Low abd pain – abd pain	.875
3	Lack of concentration – memory loss	.834
4	Appetite loss – swallowing difficulty	.826
5	Abd fullness – indigestion	.814
6	Appetite loss – change of appearance	.750
7	Sorrow – nervousness	.749
8	Cough –common cold symptom	.749
9	Lack of concentration – fatigue	.729
10	Appetite loss – alopecia	.715
11	Sweating – hot flush	.707
12	Dysuria - constipation	.685
13	Sorrow – irritation	.693
14	Anorexia – weakness	.674
15	Memory loss – oral dryness	.672
16	Sweating – fever	.650
17	Abd fullness – low abd pain	.646
18	pain - anorexia	.545
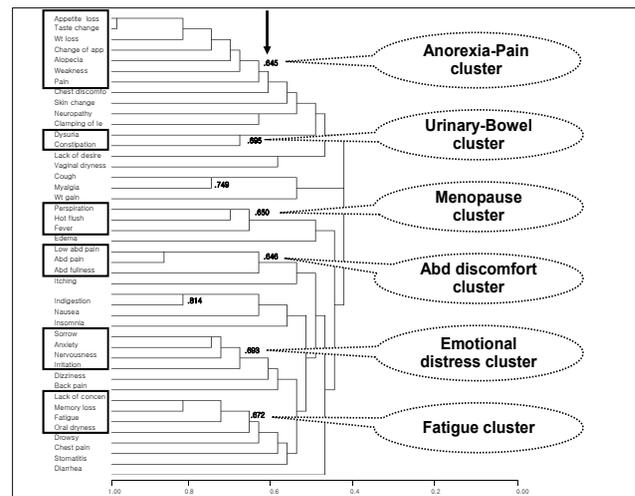
Research Results

Symptom cluster for the gynecologic cancer patients

Symptom Cluster	Symptom
Anorexia-pain cluster	Appetite loss, taste change, wt loss, appearance change, alopecia, weakness, pain
Fatigue cluster	Lack of concentration, memory loss memory, fatigue, oral dryness
Urinary-bowel distress cluster	Dysuria, constipation
Abdominal discomfort cluster	Lower abd pain, abd pain, abd fullness
Emotional distress cluster	Sorrow, anxiety-worry, nervousness, irritation
Menopause cluster	Perspiration, hot flush, fever

Discussion

- **Urinary-Bowel distress cluster:**

  Side effect of radical abdominal hysterectomy

- **Abdominal discomfort cluster:**

  Major symptom of ovarian cancer women

- **Menopause cluster: loss of ovarian function**

Recommendation

- **Identify symptom cluster by specifying patient groups in terms of diagnosis and stage of disease for women with gynecologic cancer**
- **Develop intervention based on the identified symptom clusters and identify effects**
- **Attention needed for symptoms with high severity but not identified as symptom cluster such as vaginal dryness or decreased sexual desire**