

암환아의 통증관리

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I. 서론

암을 앓고 있는 환자중 70%에서는 어느 시기엔가 심한 통증을 경험하는 것으로 알려져 있다. 그러나 불행하게도 환아의 통증은 잘 인지되지 않기 때문에 제대로 관리되지 못하고 있는 실정이다. 암환아에서 적절한 통증관리가 이루어지지 못하고 있는 주된 두 가지 이유는 첫째, 중독에 대한 두려움과 둘째, 아동은 통증을 느끼지 않기 때문에 통증관리가 필요 없다는 그릇된 신념이다. 호스피스·완화의료는 신체, 정신 및 영적 부분을 모두 포괄하는 적극적인 의미의 전인간호이다. 따라서 암환아의 통증은 제대로 관리되어야 한다.

통증은 실제적 혹은 잠재적 조직손상과 관련된 불쾌한 감각적, 정서적 경험으로 간주된다. 그런데 아동 통증의 본질은 통증의 속성이 주관적이라는 점이다.

아동의 암성 통증의 원인은 다음과 같다.

1. 질환(Disease)

- bone invasion
- soft-tissue invasion
- viscus obstruction
- central or peripheral nervous system invasion
(including back pain from spinal cord compression)

2. 요법(Therapy)

- mucositis
- mucosal damage
- postoperative pain
- infection
- radiation induced dermatitis
- gastritis from protracted vomiting
- prolonged post-lumbar puncture headache
- corticosteroid-induced bone changes
- neuropathy
(including phantom limb pain and drug-induced neuropathy)

3. 절차(Procedure)

- finger prick
- venipuncture
- injection
- lumbar puncture
- bone marrow aspiration and biopsy

4. 부수적인 것(Incidental)

- trauma
- usual childhood pains

II. 포괄적인 통증관리 방법: 치료전략

1. 통증사정
2. 통증강도 사정도구
3. 진통제 요법의 지침
4. 비약물요법의 지침

III. 통증을 관리하기 위한 약물요법

1. 해열진통제
2. 경한 마약성 진통제
3. 강한 마약성 진통제
4. 마약성 진통제의 부작용 관리
5. 보조약물
6. 투여경로

IV. 어린이의 전인적 돌봄

1. 영적 간호
2. 죽어가는 아동의 돌봄
3. 통증에 있어 윤리적으로 고려해야 할 점

V. 기타 다른 영역

1. 출혈
2. 딸국질
8. 비뇨생식기 증상
1) 비뇨기계 문제

- | | |
|------------|--------------------------|
| 3. 가려움증 | ① 요정체, ② 실금, ③ 감염 |
| 4. 오심/구토 | 9. 중추신경계 증상 |
| 5. 피부손상 | 1) 불면증과 안절부절 |
| 6. 발한 | 2) 간대성 근경련(근위축) |
| 7. 소화기증상 | 3) 발작 |
| 1) 식욕부진 | 10. 호흡기계 증상 |
| 2) 장폐색 | 1) 기침 |
| 3) 변비 | 2) 호흡곤란/Cheyne-Stokes 호흡 |
| 4) 구강건조/탈수 | 3) 임종 때의 가래 끓는 소리 |
| 5) 구내염 | |

Table 1. Primary Behavioral Signs of Pain in Children

	Acute	Persistent
Crying	✓	
Distressed facial expression	✓	
Motor disturbances (localized and whole body)		✓
Lack of interest in surroundings		✓
Lowered ability to concentrate		✓
Sleeping difficulties		✓
Withdrawal from normal activities		✓

Table 2. Non-Drug Pain-Relief Methods

Cognitive	Behavioral	Physical
Information	Deep breathing	Massage
Choices	Relaxation	Muscle and limb stimulation
Distraction and attention	Rhythmic exercise	Heat and cold*
Chanting	Art and play therapy	TENS(Transcutaneous Electrical Nerve Stimulation)
Imaginary	Biofeedback	Acupuncture
Hypnosis	Desensitization	

* Cold should not be used with infants,
heat should not be used for children with growing tumors.

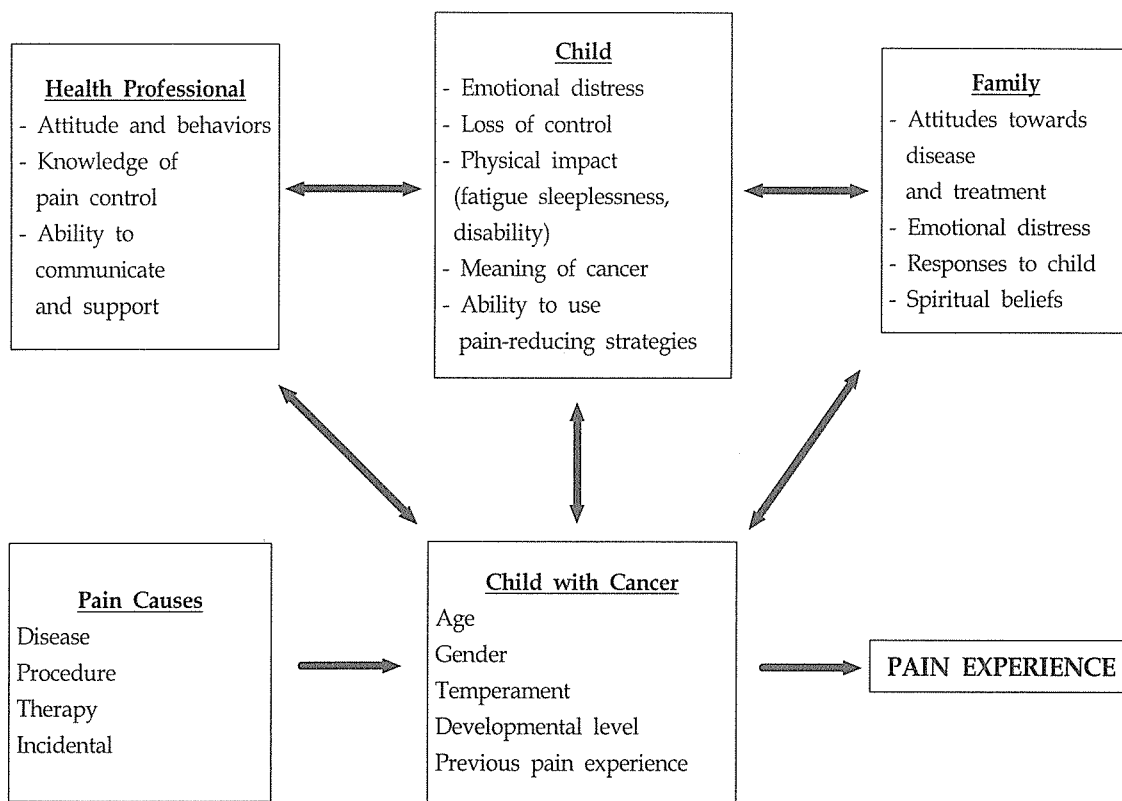


Figure 1. Factors That Affect A Child's Cancer Pain

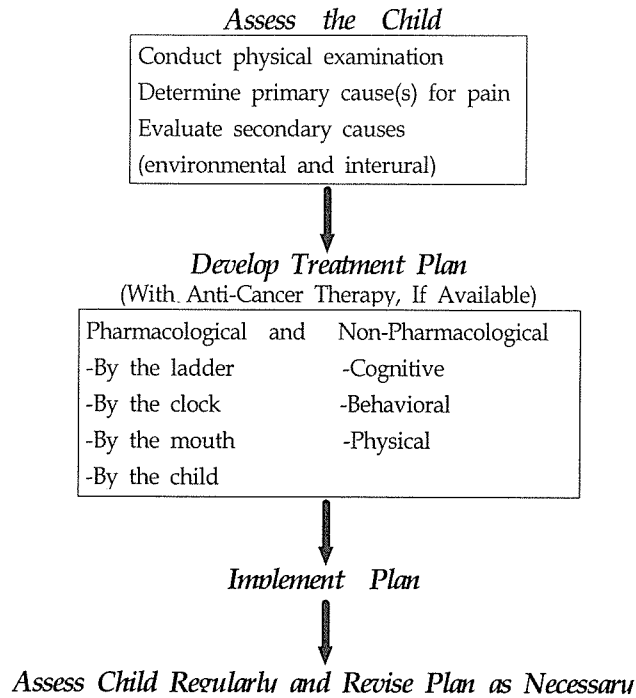


Figure 2. Relieving Pain in Children with Cancer

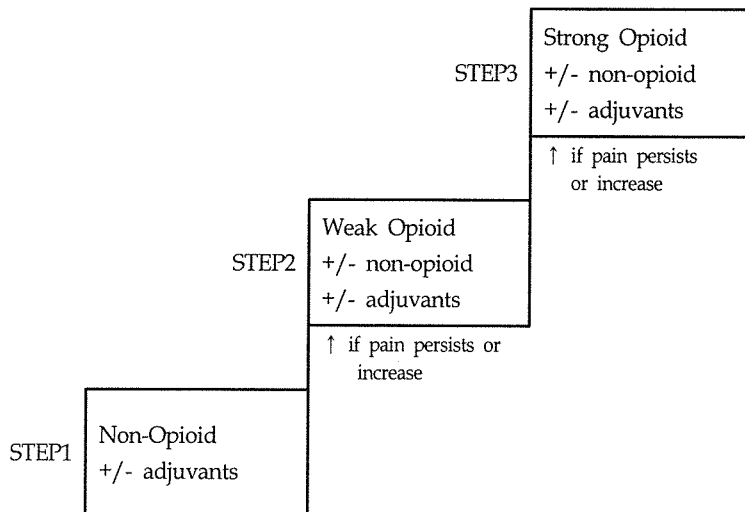


Figure 3. The Analgesic Ladder for Cancer Pain Management

Appendix 1. Symptom and Side-effect Management

Appendix 1 summarizes the major medical problems for children with cancer, some are specific for dying children. Treat physical systems and side-effects aggressively to reduce the child's suffering. Symptoms may have several causes, but the common causes are listed with appropriate symptom treatment. (Note: In addition to symptom management, treatment should be directed by the specific cause.)

GASTROINTESTINAL SYMPTOM	CAUSE	TREATMENT
Anorexia	Swallowing difficulty Apathy	Small amount of palatable food Corticosteroids
Bowel obstruction	Atonic-ileus Local or metastatic tumor	Pain management Anticholinergic Hyoscine, atropine Metoclopramide
Constipation	Inactivity Poor nutrition Chemotherapy Opioids	Increased fluids and bulk Massage abdomen Stool softeners Docusate Metamucil Glycerin suppositories Lubricants Digital stool removal Enemas
Dry Mouth /Dehydration	Swallowing difficulty Apathy Drug effects Lack of water	Ice chips Fluid sips Flavored sweets Artificial saliva Buccal spray, with parenteral fluids IV fluids
Mucositis and mouth sores	Chemotherapy Infection Poor hygiene	Good oral hygiene Petroleum jelly to cracks Mouth wash 2% viscous lidocaine 2% Cetacaine spray weak opioids Antifungal and antiviral drops
GENITOURINARY SYMPTOM		
Urinary problems	Retention	Massage or apply pressure over bladder
	Incontinence	Overflow retention Use diaper Condom for boys
	Infection	Antibiotics Pyridium, as urinary analgesic

CNS SYMPTOM	CAUSE	TREATMENT
Insomnia and restlessness	Multiple causes Bladder or bowel distension	Pain management Reassurance Neuroleptics Sedatives Hypnotics Tricyclic anti-depressants
Myoclonus(Muscle twitching)	Opioids Hypoxia CNS involvement	Benzodiazepines (Clonazepam)
Seizures	Primary or metastatic CNS tumor Metabolic abnormality	Anticonvulsants Phenytoin Phenobarbital Chloral hydrate Correct metabolic abnormality
RESPIRATORY SYMPTOM		
Cough	Lung infection Bronchial irritation Tumor/fluid overload Poor circulation	Well-humidified air Weak opioids
(Note: Dyspnea is profoundly distressing for children and families. Immediate treatment should include both pharmacological and non-pharmacological methods, specifically directed at the cause.)		
Cheyne-Stockes respiration	Slowed circulation Terminal Respiratory phase	Slowed circulation Terminal Respiratory phase
"Death rattle"	Increased secretion in posterior pharynx	Explain sign to family Support Low- dose SC hyoscyamine
HAEMATOLOGIC SYMPTOM		
Bleeding	Thrombocytopenia Coagulopathy	Coagulation factors Transfusion Local pressure Gel foam Packing Topical thrombin Ice pack
	Related tumor	Radiotherapy Tranexemic acid
(Note: Although rare, major bleeding is frightening. If a terminal ill child bleeds severely, reassure child and family, keep child warm, and consider rapid sedation. Use darkly colored towels if bleeding is anticipated to reduce the visual impact and reduce the anxiety of the child family.)		

OTHER SYMPTOM	CAUSE	TREATMENT
Fever	Disease CNS involvement Infection Drug fever	Tepid sponging Pracetamol Antibiotics Corticosteroids
Hiccups	Compressed stomach Diaphragmatic irritation	Cold water to drink Hold breath Rebreathing Pharyngeal stimulation Phenothiazine Anticholinergic
Itching	Drug effect, allergy Limited fluid intake Increased cachexia Renal-hepatic insufficiency	Neuroleptics Antihistamines Topical steroids Cold dressings Skin empollients TENS
(Note: Although young children often do not complain, itching can cause sever agitation. Consider allergy to bedsheets or skin infection)		
Nausea/vomiting	Chemotherapy Drug effects Gastric stasis Bowel obstruction CNS involvement Apprehension	Neuroleptics Ondansetron Corticosteroids Benzodiazepines
Skin breakdown	Decreased activity Poor nutrition Neurologic problems	Preventive care at onset Frequent turning Repositioning Massage Special mattress Heel protectors Skin lotions Topical antibiotics
Sweating	Fever Opioids	Local comfort measures Anticholinergic
(Note: Sweating can be an early sign opioid withdrawal. Although uncommon, sweating is uncomfortable for the child and makes nursing care more difficult due to frequent bed and clothing changes.)		

BEREAVEMENT

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애도

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Key differences between grieving & depression

Loss	There is a recognizable loss by the bereaved	There may not be a recognizable loss by the depressed
Mood status	Quickly shifts from sadness to more normal state is same day	Sadness mixed with anger. Tension or absence of energy
Expression of anger	Open anger & hostility	Absence of externally directed anger & hostility
Expression of sadness	Weeping	Difficulty in weeping

슬픔과 우울의 차이

상실	애도에 의한 인식할 만한 상실이 있다.	우울에 의한 인식할 만한 상실이 없을 수 있다.
정서상태	하루에도 슬픔에서 정상적인 기분으로 빠르게 변한다.	슬픔과 분노가 공존한다. 긴장 또는 기운이 없다.
분노표현	분노와 적대감	겉으로 보기에 분노와 적개심이 없다.
슬픔표현	울음	울기가 어렵다

Continuation of differences

Responsiveness	Responsiveness warmth and reassurance	Responds to repeated promises, pressure, and urging or unresponsive to most stimuli.
Pleasure	Variable restriction	Persistent restrictions of pleasure.

슬픔과 우울의 차이 (계속)

반응	온정과 확신 반응	반복된 약속, 압박, 그리고 요구에 대한 반응 또는 모든 자극에 대한 무반응
쾌락	변하는 한계	지속적인 쾌락에 대한 제한

Physical symptoms

- Fatigue
- Headache
- Sighing
- Insomnia
- Loss of appetite or overeating
- Dry mouth
- Restlessness /lethargy

신체증상들

- 피로
- 두통
- 한숨
- 불면
- 식욕상실 또는 과식
- 구강건조
- 안절부절/기면

Continuation of physical symptoms

- Numbness
- Nausea or acid stomach
- Excessive perspiration
- Constipation or diarrhea
- Dizziness
- Shortness of breath
- Sexual difficulties

신체증상들(계속)

- 저린감
- 오심 또는 신트림
- 심한 발한
- 변비 또는 설사
- 어지러움
- 숨가쁨
- 성적장애

Psychological symptoms

- Thinking/ talking about the person
- Feelings of helplessness
- Crying or despondency
- Disbelief or shock
- Difficulty concentrating
- Anger toward others
- Anxiety

심리적인 증상들

- 사고/사람에 대해 말함
- 무력감
- 울음 또는 의존성
- 불신 또는 충격
- 집중곤란
- 타인에 대한 분노
- 불안

Continuation of psychological symptoms

- Irritability
- Guilt
- Withdrawal/feelings of aloneness
- Difficulty remembering
- Apathy
- Unclear thoughts
- Indecisiveness
- Tardiness or absenteeism

심리적인 증상 (계속)

- 과민함
- 죄책감
- 위축/혼자인 느낌
- 기억장애
- 무감각
- 불명확한 사고
- 우유부단함
- 지각 또는 결석

Lindemann :

- Delay of mourning
- Overactivity without a sense of loss
- Appearance of symptoms of the deceased
- Change in relationships
- Hostility
- Decrease in social interaction
- agitated depression

Lindemann :

- 애도의 연장
- 상실감 없는 과다활동
- 망자에 대한 증상발현
- 관계성의 변화
- 적개심
- 사회적 상호작용의 감소
- 걱정성 우울증

Erick Lindemann-grief has 3 stages

- Emancipation from the bondage to the deceased
- Readjustment to the environment in which the deceased is missing
- The formation of new relationships

Erick Lindemann-슬픔의 3단계

- 망자와의 결속에서 해방
- 망자가 없는 환경에 재적응
- 새로운 인간관계 형성

John Boulby -3 stages

- Protest and denial
- Despair & disorganization
- Reorganization

John Boulby -3 단계

- 저항과 부정
- 실망과 재구성
- 재조직

Grief is healthy when

- Gradually diminishes in intensity (?)
- Accepts the absoluteness of the final separation
- Commitment to the mainstream of life

Grief is healthy when

- 점차적으로 강도가 감소한다 (?)
- 마지막 결별에 대한 절대적인 수용
- 삶의 정상을 되찾아야겠다는 결심

Definitions

- Bereavement: the fact of loss through death
- Bereavement reactions: any psychological, physiological or behavioral response to bereavement
- Bereavement process: bereavement reactions over time
- Grief: the feeling (affect) & behaviors eg/ crying

정의

- 애도 : 죽음으로 인한 상실의 사실
- 애도반응 : 애도에 대한 심리적, 생리적, 행위적 반응
- 애도과정 : 시간의 흐름에 따른 애도반응
- 슬픔 : 느낌(감정)과 행위(예) 울음

Does bereavement

- Predisposes people to physical & mental illness?
- Precipitates illness & death?
- Aggravates existing illness?
- Brings on bodily complaints & physical symptoms?
- Increases smoking, drinking & drug use?

애도는

- 신체적, 정신적 질병의 소인이 되는가?
- 질병과 죽음을 유발하는가?
- 현재의 질병이 악화시키는가?
- 신체적 증상을 가져오는가?
- 흡연, 음주, 그리고 약물복용을 증가시키고 있는가?

Particular types of bereavement

- Death of a spouse
- Death of a child
- Stillbirths, Perinatal deaths, Sudden infant death, death of older child
- Death of parent during adult life
- Death of a sibling during adult life
- Bereavement following suicide

애도의 특별한 유형

- 배우자 사망
- 아이의 사망
- 사산, 주산기 사망, 영아기 돌연사, 아동기 사망
- 성인기의 부모의 사망
- 성인기의 형제의 사망
- 자살로 인한 애도

Continuation of differences

Sleep disturbances	Disturbing dreams, episodic difficulties in getting to sleep	Severe insomnia, early morning awakening
Self-concept	Sees self as to blame, empty world	Sees self as bad, self as worthless, preoccupation with self

Continuation of differences

수면장애	기본 나쁜 꿈, 잠들기가 어려움	일찍 눈이 떠지며, 심각한 불면증
자아개념	자신을 자책하고, 형편 세계로 본다	자신이 나쁘거나 무가치하다고 보고, 자신만의 세계에 몰입한다