신체질환과 외상 후 스트레스 장애

이 상 열
원광의대 신경정신과학교실

Physical Illness as a Stressor

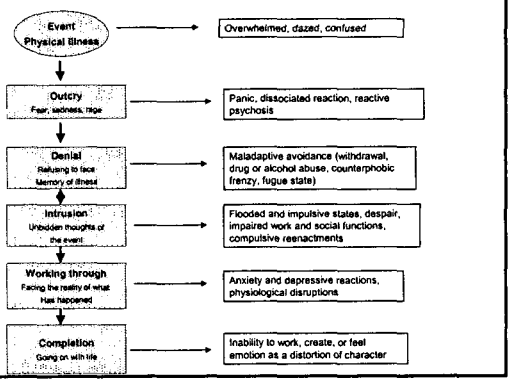
- *Traumatic Stressor or psychological trauma*
  - from "outside the range of normal human experience" to " actual or threatened death or serious injury, or a threat to the physical integrity of self or others" and "stressors causing intense fear, helplessness or horror "
  - presence of an implicit or explicit life-threat and extremely negative reactions
- Violent personal assault, motor vehicle accidents, natural or manmade disasters
- Unexpected death of a family member or a close friend, learning that one's child has a life-threatening disease
- Being diagnosed with a life-threatening illness (cancer, myocardiac infact, HIV Dx, Burn...)

Stress Response Syndrome (Horowiz 1976)

- Stress : situation in which the individual is suddenly confronted (or assaulted) with information that is affectively overwhelming or extremely powerful
- Hospital setting
  - require radical surgery or amputation
  - has terminal illness or a malignancy
  - new round chemotherapy is needed

=>threaten one's physical integrity and sense of stability would produce stress

Acute Stress Disorder -> Acute PTSD -> Chronic PTSD



Acute Stress Disorder and PTSD

- ASD : dissociation, re-experiencing symptoms along with avoidance, anxiety, increased arousal, and significant distress or impairment lasting up to 4 weeks after a trauma
- ASD -→ PTSD

  : acute numbing, depersonalization, a sense of relieving the trauma, and motor restlessness within a month of a trauma

(Harvey and Bryant RA 1998)

Medical Stressors ?

- Convey life-threat (MI, malignant arrythmia, cancer, *AIDS, other acute and chronic disease, Tx and remedies*)
- Medical diagnoses and events result in extreme fear, helplessness, or horror

< Myocardiac Infaction : Ginsburg 2002>

- danger of disability and death
- event is sudden and usually unexpected
- patient experiencing it can feel powerless to avoid it
- predict of PTSD ; degree of life-threat, anticipation of permanent disability

How are medical stressors different ?

- Lower prevalence of PTSD among medical patients

Study	N		prevalence
Bennett et al(2001)	75	3 mo. post-hospital admission	16%
Kutz et al(1994)	100	14 mo. post MI	16%
Doerfler et al(1994)	50	6-12 mo. post cardiac incident	8%
Shemesh et al(2001)	102	6-12 mo. after discharge	10%
Bennett and Brooke(1999)	44	6-12 mo. previsouly MI	10%

How are medical stressors different ?

- Future-oriented aspect in contrast to traditional traumas
  - conventional traumatic events : re-experience of past trauma and ongoing sequelae of trauma
  - medical stressors
    : re-experience of PTSD : fears and worries about treatment, survival, recurrence, stigma, and the persistence of life-threat and new danger
    : intrusion may be past and future oriented

Burn and PTSD

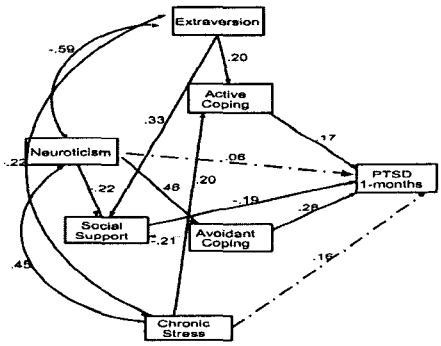
- Prevalence
  - 35.3% at 2 months, 40% at 6 months, 45.2% at 12 months (Perry et al 1992)
  - 7% at hospital discharge, 22% at 4 months later (Roca et al 1992)

  => increasing incidence of PTSD over time
- Occur days to months after the burn injury
- Sleep disturbance and nightmare, experiencing flashback
- Risk factors for the developing PTSD
  : burn trauma itself, its treatment, painful nature, devridement of necrotic burned tissue, extended periods in the ICU by intubation and treatment with paralyzing agents, high doses of short acting benzodiazepine

Personality, Coping, Chronic Stress, Social Support and PTSD among Adult Burn Survivors

- 158 adult burn survivors
- PTSD measures at 1 month and 6 month
- 46% at hospitalization and 29% at 1 month
- Neuroticism – most important personality dimension in predicting PTSD
- Avoidant coping and social support mediated a high percentage of the relationship between neuroticism and PTSD
- Best predictor of PTSD symptoms at 1 and 6 month -> PTSD symptoms at hospitalization

Lawremce JW and Fauerbach JA 2003



Burn, ASD and PTSD

- 83 hospitalized adult burn patients
- Assessed with structured interview and self-report measures within 2 weeks of injury and again at least 6 months postburn (Difede J et al 2002)

TABLE 2. Percent of Hospitalized Burn Patients Meeting Symptom Criteria for ASD and Each ASD Symptom Cluster as Assessed by Structured Clinical Interview

Number of symptoms required	Absent	Present
Criterion B: intrusion[a] ≥1	34 (41.0%)	49 (59.0%)
Criterion C: avoidance[a] ≥1	36 (43.0%)	47 (57.0%)
Criterion D: arousal[a] ≥1	22 (27.0%)	61 (73.0%)
Dissociative criterion[b] ≥3	61 (74.0%)	22 (26.0%)
ASD Diagnosis (all criteria met)	67 (81.0%)	16 (19.0%)

[a] According to the F1f2 rule.
[b] According to the SCID dissociative criteria.

TABLE 6. *Percent of Hospitalized Burn Patients Meeting* Symptom Criteria for PTSD[a] and Each PTSD Symptom Cluster as Assessed by Structured Clinical Interview

Percent of Symptoms Required	Absent	Present
Criterion B: intrusion ≥1[b]	34 (41.0%)	49 (59.0%)
Criterion C: avoidance ≥2[b]	64 (77.1%)	19 (22.9%)
Criterion D: arousal ≥2[b]	45 (54.2%)	38 (45.8%)
PTSD diagnosis (all symptom criteria met)	66 (79.0%)	17 (21.0%)

[a] The 1-month time criteria notwithstanding.
[b] According to the CAPS-1[12] rule.

TABLE 8. Forward Stepwise Logistic Regression Dependent Variable—Chronic PTSD

Step and Variable	B	SE	Wald	P	OR	95% CI for OR
A						
Step 1, ASDs[a] (time-limited criterion symptoms)	−3.9	28.7	0.92	.89	1.0[c]	—
Step 2, Dissociative symptoms[b]	−2.1	28.7	0.01	.95	—	2.6[c]
B						
Step 1, PTSDs[a]	−3.7	36.7	0.02	.827	10.02[c]	
Step 2, Dissociative symptoms[b]	[Dropped from the equation]					

[a] p < .05.
[b] p < .001.
[c] One intrusive, one avoidant, and one arousal symptom.
[d] 2 dissociative symptoms.
[e] One intrusive, three avoidant, and two arousal symptoms.

Cancer and PTSD

- Both syndromal and subsyndromal
  - cancer related current PTSD 0% - 32%
  - lifetime cancer related PTSD 3.5% - 35.1%
- 115 patients with breast cancer
- 41% reported intense fear, helplessness, or horror
- Cancer-related PTSD was uncommon 4%

(*Palmer SC et al 2004*)

Stress response syndrome and Breast Cancer

- 66 female with breast cancer outpatients
- At least 12 months after diagnosis and primary treatment
- 69 healthy women undergoing mammographic surveillance
- Previous cancer, pre-maamography breast cancer complaints, lower income, previous psychiatric medication use, greater somatization, greater perceived physician disengagement, and less perceived physician

Support increased stress response

(Gurevich M et al 2004)

TABLE 2. Stress-Response Symptom Levels

	No Previous Cancer (N = 69)		Previous Cancer (N = 66)		
Variable	Mean (SD)	% > crit.	Mean (SD)	% > crit.	Effect size (d)
Total acute stress[a]	.69 (.91)	2.80	1.37 (1.05)	9.00	.75
Dissociative[b]	.45 (.80)	1.40	1.07 (1.05)	3.00	.78
Re-experiencing[c]	.58 (.95)	5.70	1.23 (1.25)	10.50	.68
Avoidance[d]	.83 (1.17)	7.00	1.34 (1.21)	12.10	.44
Arousal[e]	1.00 (1.21)	11.40	1.86 (1.40)	25.60	.79
Impairment[f]	.66 (1.10)	8.60	1.29 (1.36)	12.00	.57

[a] $t(128) = -3.97$, $p < .0001$. [b] $t(128) = -3.01$, $p < .0001$. [c] $t(128) = -3.41$, $p < .001$.
[d] $t(128) = -2.43$, $p < .02$. [e] $t(128) = 4.18$, $p < .0001$. [f] $t(128) = 3.02$, $p < .003$.

TABLE 5. Hierarchical Regression Analysis for the Arousal Subscale, (ARSASRQ)

Step and Predictor Variable	β	t	p	R^2	ΔR^2	ΔF	p
(1) Breast complaints	.11	1.32	.19	.16	.16	6.32	.0001
Psychiatric medication	.08	1.00	.32				
Somatization	.29	3.41	.001				
Instrumental support	.17	2.08	.04				
(2) Cancer group	.28	3.50	.001	.26	.09	5.32	.002
MDSS	−.06	−.67	.50				
PSSS	−.07	−.73	.47				
(3) Cancer group by MDSS	−.26	−.89	.37	.28	.03	2.27	.11
Cancer group by PSSS	.48	2.13	.04				

신체 질환과 외상 후 스트레스 장애의 고려점

- 신체 질환이 있는 환자에서 외상 후 스트레스 장애는 낮은 약물 순응도와 연관이 있다
- 질환의 심각도 및 연관된 장애가 질병 그 자체보다 더욱 중요하다
- 신체 질환에서 외상 후 스트레스 장애는 스트레스 반응 개념에서 이해 될 수 있다
- 중재에서 신체 질환의 과거 및 미래 지향적 측면 모두 고려되어야 한다
- 신체 질환의 진단 및 치료 과정에 대한 경험 및 인지적 왜곡 등이 교정되어야 한다
- 향후 우리나라에서 암, 심장 질환, 화상 환자 등에서 외상 후 스트레스 장애에 대한 연구가 필요하다