



USE OF SEDATIVES IN DYING PATIENTS: A MULTICENTER STUDY

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ABSTRACT

Palliative sedation (PS) is justified to use for relieving refractory symptoms in terminal cancer patients.

However, the previous studies about prevalence of PS was far from enough to reflect an actual reality of sedative use due to small size.

Furthermore, the relationship between physicians' characteristics and PS was unknown.

METHODS

- ✓ Information was gathered electronically from the medical record database about deceased patients from cancer at seven cancer centers in Korea between January 2010 and October 2015.
- ✓ Of the cohort, patients who received sedatives including benzodiazepines, propofol and barbiturates and used for symptom relief purpose within two weeks from death were regarded as PS group. Clinical data of PS group were collected regarding demographics of patients and physicians, used sedative drug, sedation type, and duration of PS.

RESULTS

Table 1. Patient clinical characteristics

Characteristics		Sedated (N = 1334, %)	Non-sedated (N = 6975, %)	p-value
Age	Median	63	62	0.547
	Range	19~95	18~97	
Gender	Male	872 (65.4%)	4323 (62.0%)	0.017
	Female	462 (34.6%)	2652 (38.0%)	
Primary tumor	GI	622 (46.6%)	2754 (39.5%)	<0.001
	Lung	389 (29.2%)	1612 (23.1%)	
	GU	69 (5.2%)	339 (4.9%)	
	Breast	62 (4.6%)	305 (4.4%)	
	Head and Neck	34 (2.6%)	227 (3.2%)	
	Others	158 (11.8%)	1738 (24.9%)	

Table 2. Clinical features of palliative sedation

Characteristics		Value (N=1334, %)
Indication	Delirium	524 (39.3%)
	Pain	308 (23.1%)
	Dyspnea	292 (21.9%)
	Others	210 (15.7%)
Duration	Median	3
(Days)	Range	1~369
Used sedative drugs	Lorazepam	438 (32.8%)
	Midazolam	385 (28.9%)
	Diazepam	248 (18.6%)
	Others	263 (19.7%)
Types	Intermittent	825 (61.8%)
	Continuous	509 (38.2%)

Table 3. Physician characteristics

Characteristics		Total	Sedation	Not sedation	p-value
Duration in practice	< 5 years	461	47 (10.2%)	414 (89.8%)	<0.001
	5~10 years	2982	658 (22.1%)	2324 (77.9%)	
	11~15 years	1645	237 (14.4%)	1408 (85.6%)	
	> 15 years	3189	392 (12.3%)	2797 (87.7%)	
Medical specialty	H/O	7598	1056 (13.9%)	6542 (86.1%)	<0.001
	IM	215	23 (10.7%)	192 (89.3%)	
	FM	432	249 (54.6%)	183 (42.4%)	
	Surgery	64	6 (9.4%)	58 (90.6%)	
Centers	A	2211	207 (9.4%)	2004 (90.6%)	<0.001
	B	2700	189 (7%)	2511 (93%)	
	C	731	88 (12%)	643 (88%)	
	D	789	164 (20.8%)	625 (79.2%)	
	E	338	126 (37.3%)	212 (62.7%)	
	F	539	268 (49.7%)	271 (50.3%)	
	G	1001	292 (29.2%)	709 (70.8%)	

- ✓ Of these 8309 patients cohort, 1334 cases (16.1%) were received PS.
- ✓ Delirium (524/1334, 39.3%) was the most common cause for sedative agents use followed by intractable pain (308/1334, 23.1%) and dyspnea (292/1334, 21.9%). Benzodiazepine was the most frequently used medication in order of lorazepam (438/1334, 32.8%), midazolam (385/1334, 28.9%) and diazepam (248/1334, 18.6%).
- ✓ As for the sedation type, Intermittent PS (825/1334, 61.8%) was more common than continuous infusion (509/1334, 38.2%).
- ✓ Median duration of palliative sedation was 3 days (range, 1~369 days).

CONCLUSIONS

- ✓ The prevalence of PS in Korea was similar with that of western country.
- ✓ However, the data suggested the diverse clinical aspects of performing PS.
- ✓ The education and guideline on PS are warranted in Korea.