THE USE OF OPIOIDS IN THE DYING GERIATRIC PATIENT: COMPARISON BETWEEN THE ACUTE GERIATRIC WARD AND THE PALLIATIVE CARE UNIT

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CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report

INTRODUCTION

- Many elderly suffer from at least 2 chronic pathologies, leading to a lower proportion of sudden deaths

- Elderly people die more often in care facilities

- Targeting care on comfort, leads to better quality of life in terminal phase

- Little research on qualitative care at the end of life in elderly

- Terminal care mostly developed for cancer patients, who's death can be foreseen frequently

- Geriatric patients' health deteriorates more gradually, for example when suffering from organ failure or dementia

- Shift from life-extending care towards more palliative care is more difficult to determine

- Pain = most frequent and most stressful symptom at the end of life

- Opioids = first choice in treating pain

- Lack of pain control at the end of life

- WHO: increase dose until pain control

- Little data concerning use and dosage of opioids in terminal phase in elderly are available

AIM OF THE STUDY

- To investigate the differences in use and dosage of opioids in the terminal phase between the acute geriatric unit (AGU) and the palliative care unit (PCU) (i.e. the golden standard)

METHODS

- Multi-centric retrospective study

- Patients 75 years and older, who died on the ACU and the PCU in 3 hospitals during a 2-years period

- Demographic and clinical variables, and data about use and dosage of opioids in the last 72 hours before death

- Underlying pathology divided into several groups: cancer, organ failure, dementia, other

RESULTS

- 556 patients were included:
  - 170 in hospital A
  - 187 in hospital B
  - 199 in hospital C
- Mean age 84.2 (range 75-102)
- 214 (38,5%) died on PCU, 342 (61,5%) died on AGU
- People on the AGU are older compared to those on the PCU
- Most frequent main pathology was cancer on the PCU and organ failure on the AGU

Patient characteristics

		Total	Acute geriatric unit	Palliative care unit	p-value
Number		566	342	214	
Hospital department	Hospital A	170	100	70	
	Hospital B	187	93	94	
	Hospital C	199	149	50	
Gender	Male	251	142 (41,5%)	109 (50.9%)	
	Female	305	200 (58.5%)	105 (49.1%)	
Mean age		84.2	85.2	82.7	
Age category	75 – 79	122	58 (17.0%)	64 (29.9%)	<0.001
	80 – 84	177	106 (31.0%)	71 (33.2%)	
	85 – 89	164	101 (29.5%)	63 (29.4%)	
	90+	93	77 (22.5%)	16 (7.5%)	
Main pathology	Cancer	254	71 (20.8%)	183 (85.5%)	<0.001
	Organ failure	210	197 (57.6%)	13 (6.1%)	
	Dementia	38	36 (10.5%)	2 (0.9%)	
	Other	54	38 (11.1%)	16 (7.5%)	

Use of opioids

- 84,2% received opioids (p<0.001):
  - 75.5% on AGU
  - 98.2% on PCU

		Total	Opioids = no (n = 88)	Opioids = yes (n = 468)	p-value
Department	AGU	342	84 (24.5%)	258 (75.5%)	<0.001
	PCU	214	4 (1.8%)	210 (98.2%)	
Hospital	Hospital A	170	36 (21.2%)	134 (78.8%)	<0.001
	Hospital B	187	4 (2.1%)	183 (97.9%)	
	Hospital C	199	48 (24.1%)	151 (75.9%)	

Logistic regression (Nagelkerke R Square 31%)

- Opioids vs no opioids
- Hospital and department had a significant influence on whether or not the patients received opioids
- In hospital B, patients were 11 times more likely to receive opioids compared to hospital C
- Patients admitted to the PCU were 11 times more likely to be treated with opioids compared to the AGU
- Having cancer or not did not influence the possibility of being treated with opioids

	OR	95% for OR		Sig.
		Lower	Upper	
Gender	1,076	,634	1,826	,786
Age category				,181
Hospital (B vs C)	11,713	4,046	33,904	,000
Cancer yes/no	,763	,406	1,432	,399
Department (PCU vs AGU)	11,518	3,822	34,709	,000

Multivariate linear regression analysis on the patients that received opioids (n = 468)

- Patients receiving opioids (n = 468)

- Dosage is dependent on:
    - department (higher dosage on PCU compared to AGU),
    - hospital (higher dosage in hospital A and B compared to hospital C) and
    - whether patients had cancer or not (lower dosage when patients did not suffer from cancer)

Parameter	B	95% Confidence Interval		Sig.
		Lower Bound	Upper Bound	
Gender (female vs male)	-3,621	-17,944	10,702	,620
Age category (75-79 vs 90+)	17,169	-6,743	41,080	,159
Age category (80-84 vs 90+)	15,932	-6,550	38,415	,164
Age category (85-89 vs 90+)	18,611	-4,074	41,296	,108
Department (PCU vs AGU)	28,340	9,704	46,975	,003
Hospital (A vs C)	36,111	17,854	54,367	,000
Hospital (B vs C)	18,125	1,124	35,125	,037
Cancer (no vs yes)	-27,429	-45,494	-9,363	,003

CONCLUSIONS

- Organ failure is more frequently considered as the underlying pathology in elderly dying on an AGU, compared to cancer on a PCU

- High frequency of use of opioids in terminal phase

- Receiving opioids was influenced by hospital and department, not by suffering from cancer or not

- Dosage of opioids was dependent on department, hospital, whether patients suffered from cancer or not