ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 05, 2021

Evaluation of pain management in elderly cancer patients

Dr.Venkatesh M Rewale

Associate professor, Department of Surgery, Jawaharlal Nehru Medical College, DMIMS .Sawangi Meghe Wardha, Maharashtra, India
Email: drvmrewale@gmail.com

ABSTRACT:
Background: The prevalence of cancer increases with age, and pain is one of cancer's most frequent and disturbing symptoms. The present study was conducted to assess management of pain in elderly patients with cancer.
Materials & Methods: 450 elderly cancer patients of both genders were included. Daily pain was defined as any type of physical pain or discomfort in any part of the body that was manifested daily.
Results: Age group 65- 74 years comprised of 110 married, 75-84 years had 165 married and >85 years had 138 married. Degree activities of daily living compromised Moderately were 100, 150 and 120 and severely were 20, 30 and 30, degree of impaired cognitive performance moderately was 90, 140 and 110 and severely was 30, 40 and 40. Depressed mood was seen in 55, 138 and 125 and bedridden were 48, 70 and 55, number of drugs taken was 7.1, 6.5 and 6.1 and daily pain was seen in 48, 54 and 35 in patients with age group 65- 74 years, 75-84 years and >85 years. The difference was significant (P< 0.05).
Conclusion: Daily pain is highly prevalent among elderly cancer patients.
Key words: Pain, Elderly, Cancer

Introduction

The prevalence of cancer increases with age, and pain is one of cancer's most frequent and disturbing symptoms. Despite the widespread dissemination of the World Health Organization's 3-level ladder, and the demonstration that its appropriate use can relieve pain in more than 90% of cases, pain management remains poor.[1] A high prevalence of unrelieved cancer pain has been documented in a variety of clinical settings, including general medical and surgical units, oncology wards, emergency departments, and pediatric wards.[2]
Cancer risk increases with age, and a rapidly growing older population will increase the demand for cancer care.[3] The diagnosis and treatment of cancer and cancer-related symptoms in older age groups are often complicated by other medical conditions. Despite therapeutic advances in analgesia, cancer-related pain remains an important and often unresolved problem.[4] At least 50% of cancer patients present with pain, with one-third being graded as moderate to severe. The highest prevalence of pain concerns is within the metastatic setting, where the goal of any cancer treatment is palliative.[5]
Geriatric oncology has become an independent speciality that deals with a population that is quite different from the patients included in most published clinical trials.[6] Currently, information on the particular management of cancer-associated pain has to be extrapolated from younger patients.[7] The present study was conducted to assess management of pain in elderly patients with cancer.

Materials & Methods

The present study was conducted among 450 elderly cancer patients of both genders. All were enrolled after they gave their written consent.
Data pertaining to patients such as name, age, gender etc. was recorded. Daily pain was defined as any type of physical pain or discomfort in any part of the body that was manifested

ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 05, 2021

daily. The assessors were instructed to observe such patients for indicators of pain, such as moaning, crying, wincing, frowning, or other facial expressions or posturing such as guarding or protecting an area of the body. Drugs such as salicylates, acetaminophen, and nonsteroidal anti- inflammatory drugs were labelled as level 1; level 2: codeine phosphate or codeine sulfate, oxycodone hydrochloride, hydrocodone bitartrate, propoxyphene hydrochloride or propoxyphene napsylate, meperidine hydrochloride, pentazocine hydrochloride or pentazocine lactate, buprenorphine hydrochloride, nalbuphine hydro-chloride, butorphanol tartrate and any combination of these compounds with WHO level 1 drugs and level 3: morphine sulfate, hydromorphone hydro- chloride, oxymorphone hydrochloride, methadone hydrochloride, levorphanol tartrate, and fentanyl citrate. Corticosteroids, antidepressants, benzodiazepines and anesthetics as well as anti-neoplastic hormones were considered to be adjuvant medications. Results were tabulated and subjected to statistical analysis. P value less than 0.05 was considered significant.

Results

Table I Patients characteristics with Cancer

Variables	Age 65-74 years (120)	75-84 years (180)	>85 years (150)	P value
Married	110	165	138	0.05
Unmarried	10	15	12	
Degree activities of daily living compromised Moderately	100	150	120	0.04
Severely	20	30	30	
Degree of impaired cognitive performance Moderately	90	140	110	0.03
Severely	30	40	40	
Depressed mood	55	138	125	0.01
Bedridden	48	70	55	0.07
Number of drugs	7.1	6.5	6.1	0.16
Daily pain	48	54	35	0.05

Table I, graph I shows that age group 65- 74 years comprised of 110 married, 75-84 years had 165 married and >85 years had 138 married. Degree activities of daily living compromised Moderately were 100, 150 and 120 and severely were 20, 30 and 30, degree of impaired cognitive performance moderately was 90, 140 and 110 and severely was 30, 40 and 40. Depressed mood was seen in 55, 138 and 125 and bedridden were 48, 70 and 55, number of drugs taken was 7.1, 6.5 and 6.1 and daily pain was seen in 48, 54 and 35 in patients with age group 65- 74 years, 75-84 years and >85 years. The difference was significant ($P< 0.05$).

ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 05, 2021

Graph I Patients characteristics with Cancer

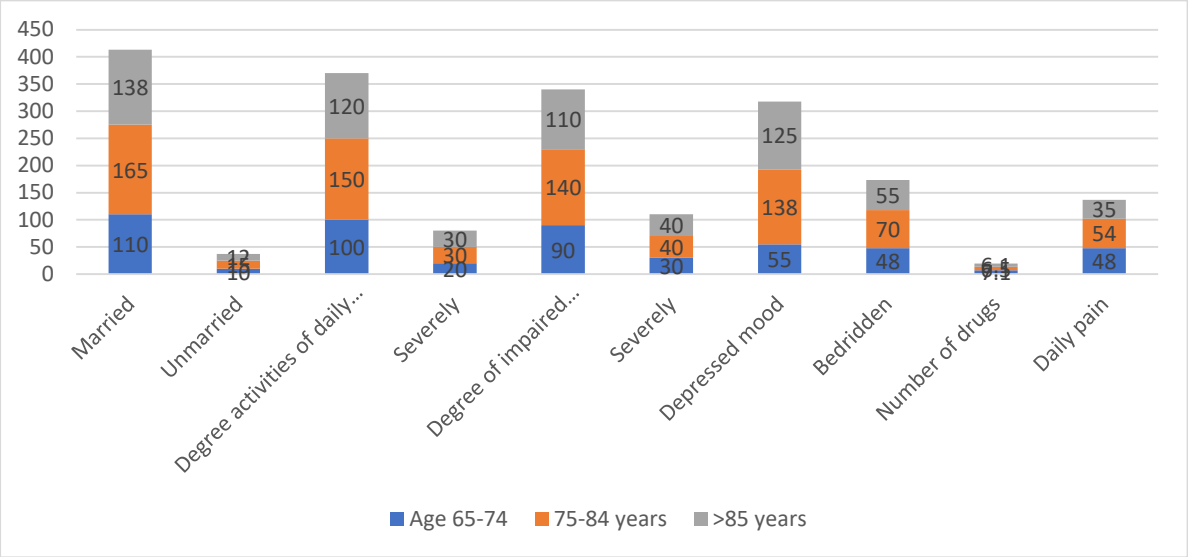

Table II Predictors of receiving no analgesia among patients with cancer with daily pain

Parameters	Variables	No Analgesia (n = 140)	Analgesia (n = 310)	Univariate odd ratio	Adjusted Model odd ratios
Gender	Male	80	170	1	1
	Female	60	140	0.87	0.90
Age group (years)	65-74	30	120	1	1
	75-84	60	90	1.25	1.18
	>85	50	100	1.52	1.43
No of medication	1-5	80	190	1	1
	5-10	40	70	0.83	0.86
	>10	20	50	0.67	0.64
Compromised activities of daily living function		90	200	1.09	1.12
Impaired cognitive performance		80	230	1.30	1.24
Ambulatory		48	229	1	1
Bedridden		92	81	0.78	0.81
Prognosis not terminal		110	160	1	1
Explicit terminal prognosis		30	150	0.78	0.75

Table II shows predictors of receiving no analgesia among patients with cancer with daily pain.

Discussion

The amplitude of pain and the way it affects frail older adults with cancer is substantial. Ageing leads to an alteration in the pharmacokinetic and pharmacodynamic profiles, including a narrow therapeutic index, delayed drug elimination due to hepatic and renal insufficiency and reduced receptor sites for drug binding and reduced volume of distribution.[8,9] Although geriatric oncology patients have the particularity of a different physiological reserve and usually more comorbidities, they share the same cancer-related symptoms as the younger population.[10] Frail older patients might express their symptoms in

ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 05, 2021

different ways when compared to younger ones.[11] The present study was conducted to assess management of pain in elderly patients with cancer.

In present study, age group 65- 74 years comprised of 110 married, 75-84 years had 165 married and >85 years had 138 married. Degree activities of daily living compromised Moderately were 100, 150 and 120 and severely were 20, 30 and 30 in patients with age group 65- 74 years, 75-84 years and >85 years. Nipp et al[12] performed a secondary data analysis from a randomised two-by-two factorial trial in order to determine whether pain medications used in older patients were associated with better pain control. The population consisted of frail individuals aged 65 or older who were randomised to receive care in a geriatric inpatient unit, outpatient clinic, both or neither. Ninety-nine individuals with cancer were included, of whom 44 received a geriatric evaluation and were treated in a management unit care (GEMU) and 55 were treated with standard care procedures. GEMU patients (from inpatient or outpatient clinics) had a higher number of interventions as compared with those in usual care, mainly in the form of psychiatry, endocrinology, psychology and occupational and physical therapy. Besides there being no significant difference in the pain medication used between the intervention and usual care groups, there was significantly better pain control in the individuals of the GEMUs, suggesting that this might be related to an interdisciplinary approach.

We found that degree of impaired cognitive performance moderately was 90, 140 and 110 and severely was 30, 40 and 40. Depressed mood was seen in 55, 138 and 125 and bedridden were 48, 70 and 55, number of drugs taken was 7.1, 6.5 and 6.1 and daily pain was seen in 48, 54 and 35 in patients with age group 65- 74 years, 75-84 years and >85 years. Cataldo et al[13] demonstrated in a cross-sectional study that older patients reported significantly fewer pain symptoms than their younger counterparts. Bernabei et al[14] in their study a group of 13 625 cancer patients aged 65 years and older discharged from the hospital to any of the facilities from 1992 to 1995. Prevalence and predictors of daily pain and of analgesic treatment. Pain assessment was based on patients' report and was completed by a multidisciplinary team of nursing home personnel that observed, over a 7-day period, whether each resident complained or showed evidence of pain daily. A total of 4003 patients (24%, 29%, and 38% of those aged ≥85 years, 75 to 84 years, and 65 to 74 years, respectively) reported daily pain. Age, gender, race, marital status, physical function, depression, and cognitive status were all independently associated with the presence of pain. Of patients with daily pain, 16% received a WHO level 1 drug, 32% a WHO level 2 drug, and only 26% received morphine. Patients aged 85 years and older were less likely to receive.

Conclusion

It can be concluded that daily pain is highly prevalent among elderly cancer patients.

References

1. Parker SL, Tong T, Bolden S, Wingo PA. Cancer statistics, 1996. CA Cancer J Clin. 1996;46:5-27.
2. Daut RL, Cleeland CS. The prevalence and se- verity of pain in cancer. Cancer. 1982;50:1913-1918.
3. Stjernsward J. WHO cancer pain relief pro- gramme. Cancer Surv. 1988;7:195-208.
4. K. Validation of World Health Organization guide- lines for cancer pain relief: a 10-year prospective study. Pain. 1995;63:65-76.
5. Levy MH. Pharmacologic treatment of cancer pain. N Engl J Med. 1996;335:1124-1132.
6. Donovan M, Dillon P, McGuire L. Incidence and characteristics of pain in a sample of medical-surgi- cal inpatients. Pain. 1987;30:69-87.

ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 05, 2021

7. Foley KM. Pain relief into practice: rhetoric with- out reform. J Clin Oncol. 1995;13:2149-2151.
8. Todd K, Samaroo N, Hoffmann JR. Ethnicity as a risk factor for inadequate emergency department anesthesia. JAMA. 1993;269:1537-1539.
9. Schechter NL. The undertreatment of pain in children: an overview. Pediatr Clin North Am. 1989; 36:631-646.
10. Cleeland CS, Gonin R, Hatfield AK, et al. Pain and its treatment in outpatients with metastatic can- cer. N Engl J Med. 1994;330:592-596.
11. Portenoy RK, Kornblith AB, Wong G, et al. Pain in ovarian cancer patients: prevalence, characteristics, and associated symptoms. Cancer. 1994;74:907-915.
12. Nipp R, Sloane R, and Rao AV, et al. Role of pain medications, consultants, and other services in improved pain control of elderly adults with cancer in geriatric evaluation and management units J Am Geriatr Soc 2012;60 1912–1917.
13. Cataldo JK, et al. Differences in the symptom experience of older versus younger oncology outpatients: a cross-sectional study BMC Cancer 2013.
14. Bernabei R, Gambassi G, Lapane K, Landi F, Gatsonis C, Dunlop R, Lipsitz L, Steel K, Mor V, SAGE Study Group, SAGE Study Group. Management of pain in elderly patients with cancer. Jama. 1998 Jun 17;279(23):1877-82.