



Unique challenges in the Oncologic Pain Patients with substance use disorders: Scope of the problem

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How Common is Cancer Pain?

Prevalence



During cancer treatment



Advanced, metastatic, or terminal disease



After curative treatment

Moderate to severe pain in 38% of patients.

Van den Beuken-van Everdingen et al. J Pain Symptom Manage (2016) 51:1070.



J Clin Oncol. 2017;35:2228-2237. DOI:10.1200/JCO.2017.35.2228



Who Is a Cancer Survivor? A Systematic Review of Published Definitions

Chiara Marzetti^{1,2}, Silvia Rita^{1,2}, Gabriela Pravinski^{2,3}

- There is not a unique definition of who is a cancer survivor and what is cancer survivorship.
- NCI: patients with a history of cancer who are beyond the acute diagnosis and treatment phase
- ACS: "long term cancer survivor" as any patient who has survived 5 years or more following a diagnosis of cancer.
- NCCN: an individual is considered a cancer survivor from the time of diagnosis, to the balance of his or her life
- The most widely used definition: a process that begins at the moment of diagnosis and continues through the balance of life.



Association Between Tobacco Use, Pain Expression, and Coping Strategies Among Patients With Advanced Cancer

Romy Dev, DO, Yu Jung Kim, MD, PhD, Akhila Reddy, MD, David Hui, MD, Kimberson Tanco, MD, Diane Liu, MS, Majeed Park, MS, Janet Williams, MPH, CCRP, Cindy Carmack, PhD, and Eduardo Bruera, MD

- Prospectively enrolled patients with advanced cancer
- Among 399 patients, 49% were never-smokers, 40% were former smokers, and 11% were current smokers
- Current smokers demonstrated:
 1. Significantly higher pain scores at the time of consultation
 2. Increased morphine equivalent daily dose
 3. Positive on the Cut down/Annoyed/Guilty/Eye opener questionnaire
 4. Positive on the Screener and Opioid Assessment for Patients with Pain-short form survey
 5. More likely to cope maladaptively with substance use

Cancer 2019;125:153-160



262 Journal of Pain and Symptom Management Vol 31, No. 4, April 2020

Brief Report

Association Between Tobacco Use, Symptom Expression, and Alcohol and Illicit Drug Use in Advanced Cancer Patients

Yu Jung Kim, MD, PhD, Romy Dev, DO, Akhila Reddy, MD, David Hui, MD, MS, Kimberson Tanco, MD, Majeed Park, MS, Janet Williams, MPH, CCRP, and Eduardo Bruera, MD

- Retrospective review of 300 consecutive advanced cancer patients
- 119 (40%) were never smokers, 148 (49%) former smokers, and 33 (11%) current smokers.
- Current smokers reported significantly higher pain expression than former and never (P< 0.02)
- Higher CAGE positivity (P < 0.001)
- History of illicit drug use (P < 0.001).
- **Author conclusion: smoking history may be a indicator of opioid misuse.**



Cancer 2011 October 1; 117(9): 451-456. doi:10.1093/jco/2002.

Undocumented Alcoholism and Its Relationship with Tobacco and Illicit Drug Use in Advanced Cancer Patients

Romy Dev, D.O., Henrique A. Passos, M.D., Diana Palla, M.S., J Lynn Palmer, Ph.D., Eusebio Del Fabro, M.D., and Eduardo Bruera, M.D.

- 100 of 598 patients (17%) were CAGE-positive.
- Only 13 of 100 patients (13%) in that CAGE-positive group had been identified as alcoholics before their palliative care consultation!
- Compared with CAGE-negative patients, CAGE-positive patients were:
 1. younger
 2. predominantly men
 3. history of tobacco use
 4. actively using nicotine
 5. history of illegal recreational drug use
 6. Higher dosages of opioids
- Authors conclusions: CAGE-positive patients were more likely to have a history of, or to actively engage in, smoking and illegal recreational drug use, placing them at risk for inappropriate opioid escalation and abuse.





- A total of 432 patients were evaluated
- 76 patients (18%) were diagnosed as chemically coping
- Documentation of chemical coping in the medical records was reported for only 15 patients (4%).
- Significant predictors of chemical coping by protocol definition:
 1. CAGE positivity
 2. Younger age
 3. Higher pain scores

CONCLUSION: Need for better and safer ways for physicians to assess and report chemical coping are needed.

2015 Jun;20(6):692-7. doi: 10.1634/theoncologist.2015-0012. Epub 2015 May 1.



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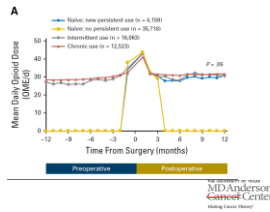
JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

New Persistent Opioid Use Among Patients With Cancer After Curative-Intent Surgery

Jin Young Im, Lee, Hyeon-Min Oh, Anthony L. Zahra, Chad M. Brummett, Michael J. Engleke, Jennifer E.

- New persistent opioid use (opioid naive patients using opioids 90-180 days after surgery)
- 68,463 eligible patients
- The risk of new persistent opioid use was 10.4% (6% to 8% undergoing non cancer procedures)
- Risk of new persistent opioid use in patients receiving adjuvant chemotherapy was 15% to 21%.
- One year after surgery, these patients continued filling prescriptions with daily doses similar to chronic opioid users.



Original Report

Persistent Postoperative Opioid Use in Older Head and Neck Cancer Patients

Ashish Sanyal, Michele M. Chen, MD, PhD, Soham C. Mukherji, MD, Alex S. Whitman, PhD, and Naveen D. Mehta

- Retrospective cohort study.
- Subjects: patients with HNC from 2008 to 2013, underwent primary surgical resection for their cancers.
- Primary outcome was PPO (persistent post-operative opioid) use, defined as new opioid prescriptions 90 to 180 days postoperatively.
- Of the 1190 eligible patients with HNC, 866 (72.8%) received opioid prescriptions attributable to their surgery.
- Prevalence of PPO use was 33.3% overall; it was 48.3% among patients with preoperative opioid use compared to 18.5% among opioid-naïve patients
- Other factors associated with PPO use include postoperative radiotherapy, and Charlson comorbidity index



Risk of opioid misuse in the vulnerable

- Chemical copers (~20%)
- Alcohol(6.2%)
- Nicotine(>50%)
- Other illicit drug(?%)
- Other risk factors(anxiety, depression)



- Exposure to opioids during active disease in a vulnerable pt., at a vulnerable time
- Opioids can have a double effect resulting in drug-seeking behaviors



Substance Abuse and Rehabilitation
 2016 Jun 2;71-9. doi: 10.2147/SAR.S85409. eCollection 2016.
 Identifying and assessing the risk of opioid abuse in patients with cancer: an integrative review

- 34 articles met criteria, including case studies, case series, retrospective observational studies, and narrative review.
- Screening questionnaires and urine drug screens indicated at least **one in five patients (20%)** with cancer may be at risk of opioid-use disorder!!!
- Several studies demonstrated associations between high-risk patients and clinical outcomes, such as aberrant behavior, prolonged opioid use, higher morphine-equivalent daily dose, greater health care utilization, and symptom burden.



Psychosomatic
 Analysis
 Substance Use Disorder Among Current Cancer Patients: Rates and Correlates Nationally in the Department of Veterans Affairs

- Data used to compare veterans with both cancer and co-morbid SUD to veterans with cancer but no SUD and those with SUD but no cancer.
- Of the 5,452,308 veterans who used VHA services in FY 2012, 482,688 (8.85%) received a cancer diagnosis and **466,726 (8.56%)** received a diagnosis of SUD
- Of **482,688 veterans with cancer diagnoses, 32,037 (6.64%)** had a comorbid SUD diagnosis.
- Veterans with cancer and SUD had more medical and psychiatric disorders, greater risk of homelessness and greater use of both mental and medical health services.
- The cancer-SUD group had higher rates of hepatic disease and received a greater number of opioid prescriptions



Cancer

2016 Dec 1;122(23):3732-3739. doi: 10.1002/cncr.30240. Epub 2016 Aug 10

Original Article

Frequency, Predictors, and Outcomes of Urine Drug Testing Among Patients With Advanced Cancer on Chronic Opioid Therapy at an Outpatient Supportive Care Clinic

Joseph A. Sparano MD, Teresa Edwards MD, Dawn L. D'Amico MD, Susan Kelly MD, David H. Ford PhD, John W. Winkler MD, Robert M. D'Amico MD, Christopher C. Allred MD, and Robert M. D'Amico MD

- Retrospective chart review of 1058 patients.
- Sixty-one patients who were receiving chronic opioid therapy and underwent UDTs were identified.
- Control group of 120 patients who did not undergo UDTs was selected for comparison.
- Sixty-one of 1058 patients (6%) underwent UDTs, and 33 of 61 patients (54%) had abnormal results.
- OR for UDT ordering was high in patients who had positive CAGE, patients aged <45 years, patients who had moderate-to-severe pain, in patients with advanced-stage cancer, and in patients who had moderate-to-severe fatigue.



Pain Medicine

Compliance with Opioid Therapy: Distinguishing Clinical Characteristics and Demographics Among Patients with Cancer Pain

Shanabazz Koyyalagunta MD, Eduardo Bruera MD, Mitchell P. Eagle MD, PhD, Larry S. Brown MD, Weidong Dong MD, MS, Chik S. Simonsen BA, MS, Diana M. Neely, PhD
Pain Medicine, Volume 19, Issue 7, 1 July 2018, Pages 1409-1417, UDT results

- Only 2.4% of patients seen in the pain clinic had a UDT!
- 58% of the patients in this retrospective cohort were non-compliant with their prescribed opioid therapy.
- Non-compliant patients were younger, more anxious, had a history or current user of ETOH, and used higher doses of opioids

Variable	No. of patients	Percent
Positive for marijuana	58	59.8
Positive for not-prescribed opioids	36	37.1
Negative for prescribed opioids	16	16.5
Positive for other illicit substances	22	22.7

Variable	Level	Total (N = 101) No. (%)	Compliant (N = 79) No. (%)	Noncompliant (N = 22) No. (%)
Disease status	Active	122 (73)	54 (44)	68 (56)
	No evidence of disease	45 (27)	34 (28)	29 (64)



Chronic opioid therapy in survivors

- Review of the literature on long-term cancer survivorship and chronic opioid therapy.
- Conclusions:
 - ✓ Chronic opioid therapy is frequent in long-term cancer survivors
 - ✓ Negatively affect the immune system
 - ✓ Produce health problems such as endocrinopathies, osteoporosis neurological or cardiopulmonary effects
 - ✓ Alterations of cell cycle kinetics
 - ✓ **Abuse and addiction: A significant number of cancer patients (29 %) are classified as being at high risk for drug abuse**

Chen Tassel Drexler. 2017 Feb 15;123(2):235-238. doi: 10.1002/cncr.31259. Epub 2016 Jul 21. Chronic opioid therapy in long-term cancer survivors. *Cerrones-Bayona A et al.*





Questions?
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