



UC San Diego
MOORES CANCER CENTER

Chronic opioid use following surgery for oral cavity cancer

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Background

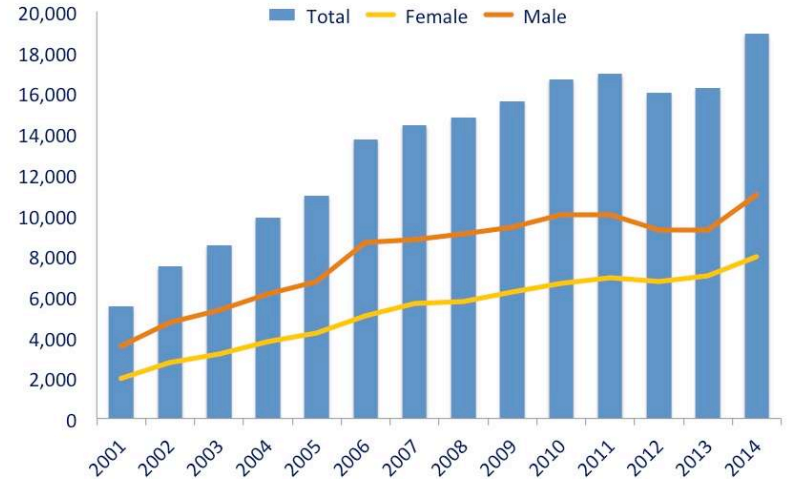
- Chronic pain affects up to 60% of patients with head and neck cancer¹⁻²
- Over the last 15 years, 4x increase in opioid-related deaths³
 1. Assess prevalence of chronic opioid use (> 90d)⁴⁻⁶ in patients undergoing surgery for oral cavity cancer
 2. Evaluate risk factors for chronic opioid use
 3. Assess relationship between opioid use and survival

Methods



National Overdose Deaths

Number of Deaths from Prescription Opioid Pain Relievers



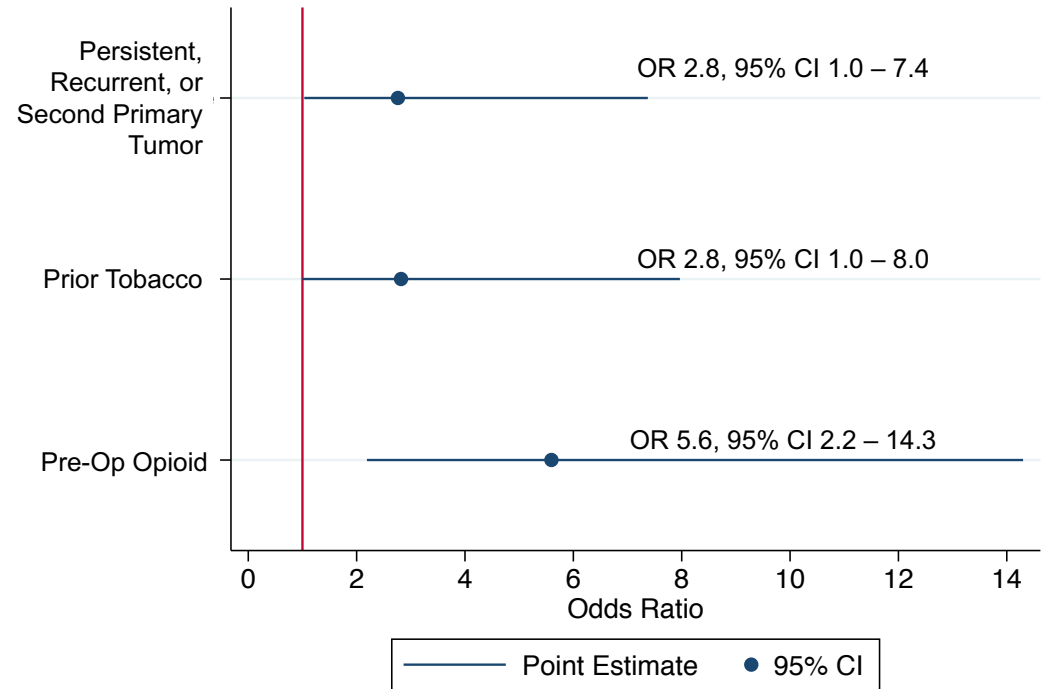
Source: National Center for Health Statistics, CDC Wonder

estimated survival

Results

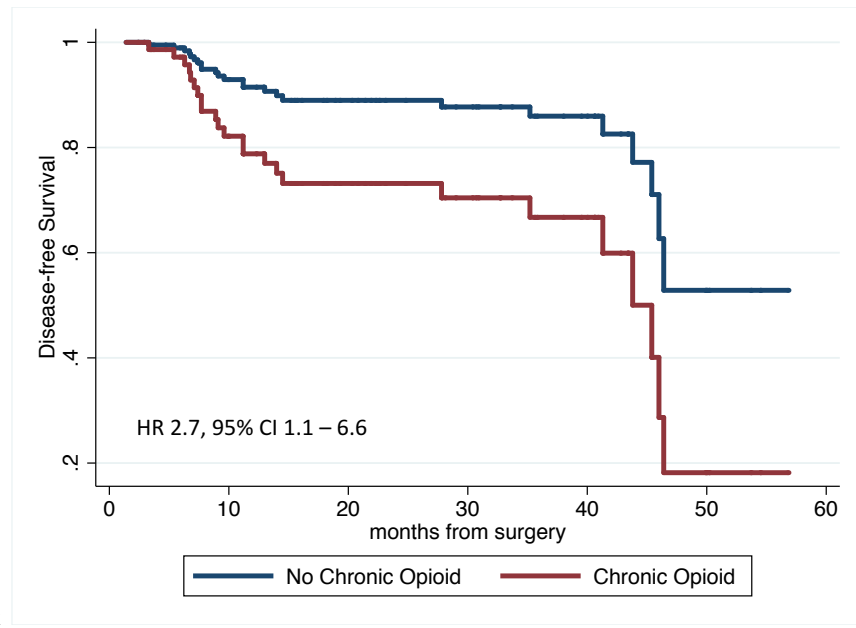
- Chronic opioid use in 41% of patients
- 49% of prescribers at 90 days were HNC providers
- 40% were on an opioid at time of surgery
- 24% opioid-naïve patients became chronic opioid users

Multivariable Logistic Regression of Factors Associated with Chronic Opioid Use



Estimated Survival by Multivariable Cox Proportional Hazards Regression.

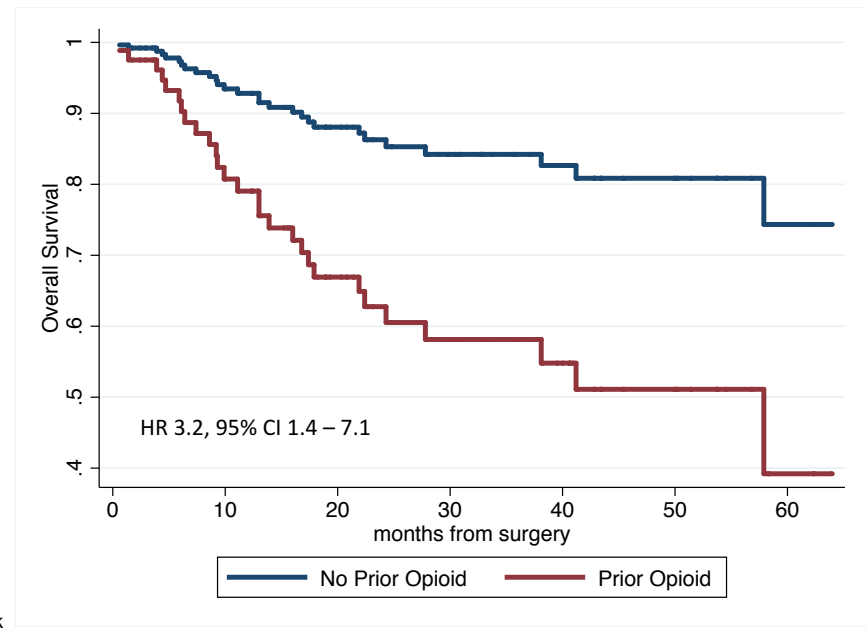
A



No. at risk

No Chronic Opioid	51	36	27	19	12	4
Chronic Opioid	36	26	16	13	8	1

B



No. at risk

No Pre-Op Opioid	56	45	33	25	15	6	1
Pre-Op Opioid	39	29	19	12	8	5	1

- Patients with carcinoma in situ on permanent pathology (n = 4) were dropped from both DFS and OS analyses. Patients with persistent disease (n = 8) were dropped from DFS
- Variables that were significant at P < 0.10 in the univariable Cox regression were included in the multivariable model
- Age-adjusted comorbidity (CACI) was included a priori. Adjusted variables for OS include CACI, pre-operative opioid use, and overall stage.
- Age-adjusted comorbidity (CACI) was included a priori. Adjusted variables for DFS include CACI, overall stage, post-operative chemotherapy, post-operative radiation, and chronic opioid use.

Conclusion

- Chronic opioid use in 41% of patients undergoing surgery for oral cavity carcinoma
- Prior tobacco users, pre-operative opioid users, and patients with persistent tumor, recurrence, or second primary tumor are at elevated risk
- Relationship between survival and opioid use merits further investigation



References

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3. Compton WM, Jones CM, Baldwin GT. Relationship between Nonmedical Prescription-Opioid Use and Heroin Use. *N Engl J Med*. 2016;374(2):154-163.
4. DeVeauh-Geiss A, Kadakia A, Chilcoat H, Alexander L, Coplan P. A retrospective cohort study of long-term immediate-release hydrocodone/acetaminophen use and acetaminophen dosing above the Food and Drug Administration recommended maximum daily limit among commercially insured individuals in the United States (2008-2013). *J Pain*. 2015;16(6):569-579 e561.
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