Chronic opioid use following surgery for oral cavity cancer

Chronic pain affects up to 60% of patients with head and neck cancer\(^1\)\(^-\)\(^2\)

Over the last 15 years, 4x increase in opioid-related deaths\(^3\)

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

**Background**

**Methods**

- Retrospective cohort study
- Surgical oral cavity cancer patients; \(n = 99\)
- Chronic opioid use at 90 days
- Analysis
  - Multivariable logistic regression of factors associated with chronic opioid use
  - Kaplan-Meier and multivariable Cox proportional hazards for estimated survival

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**National Overdose Deaths**

Number of Deaths from Prescription Opioid Pain Relievers

- Total
- Female
- Male

Source: National Center for Health Statistics, CDC Wonder
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
Estimated Survival by Multivariable Cox Proportional Hazards Regression.

- 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
