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Trends in number of women speakers at the American Head and Neck Society meetings, 2007-2019

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*From the **JAMA Otolaryngol Head Neck Surg**. July 2021*

Importance: The number of female speakers at American Head and Neck Society (AHNS) conferences should ideally be consistent with the number of women entering head and neck surgery fellowships to ensure gender equity in the field. Yet the presence of women speakers at the annual AHNS meetings, which is specific to the field of head and neck cancer, endocrine and microvascular reconstructive surgery, has yet to be studied.

Objective: To determine whether the proportion of female speakers at the AHNS has increased in a manner consistent with the numbers of women entering fellowships since 2007.

Design, setting, and participants: This qualitative study assessed 13 final meeting programs from AHNS national/international conferences from 2007 to 2019. The number of male and female participants in different roles throughout the meeting were retrospectively tracked. Participants were male and female speakers at AHNS national/international conferences who took part in the roles of scientific session presenter, scientific session moderator, expert panelist, miscellaneous moderator, and named lecturers/keynote speaker. Gender of the speaker was determined by searching names on the internet and using available published pronouns.

Main outcomes and measures: Number of speaking opportunities for men and women in different roles from 2007 to 2019 as well as number of men and women entering AHNS fellowships since 2007 and new active AHNS members since 2012.

Results: In this qualitative study, from 2007 to 2019, 4059 speakers were identified. Of these speakers, 902 (22%) were women and 3157 (78%) were men. Overall, there was a strong correlation between increasing years and number of women speakers from 2007 to 2019 (ρ = 0.75; 95% CI, 0.72-0.78). There were 2096 invited speaking roles that excluded research presentations, of which 400 were offered to female participants (19.1%) across the study period. There were 131 different women that made up all 400 of the opportunities that were offered to women in the years surveyed. There was a strong correlation in the proportion of women as presenters for oral abstracts, expert panelists, and miscellaneous moderators between the years but no correlation in scientific session moderators and named lecturers/keynote speakers. Of the 45 named lecturers/keynote speakers in the programs tracked, only 2 were women.

Conclusions and relevance: In this study, from 2007 to 2019, the presence of women at ANHS has increased overall, reflecting the changing demographic characteristics of those entering in head and neck oncology and microvascular surgery fellowships. However, a strong disparity continues to exist for preeminent speaking opportunities.

Summary statements:

- This was a qualitative study designed to evaluate whether the number of female speakers at the AHNS conferences from 2007-2019 represented the number of women entering head and neck fellowships.
- Of the 4059 speakers identified, 22% were women, and of the 2096 invited speaking roles, 400 (19.1%) were offered to women, with an increasing number of women speakers noted in later years.
- Given the increase in women entering head and neck fellowships over the last decade (13% to 26%), the visibility of women at national meetings is vital in promoting careers of women in academic medicine and encouraging those who are just starting. This article found that although the presence of women in speaking opportunities at AHNS has been increasing, but there is still a disparity in the representation of women who are invited for speaking roles highlighting the opportunity for improved representation and diversity in our society, especially at the level of keynote/expert speakers.

Strengths

- The tables and figures in this article are well-done and provide great visualization of the objective data collected. For example, Table 1 very nicely presents the gender breakdowns for scientific moderators, named lecturers, expert panelists, and miscellaneous moderators, and Figure 1 and 2 shows the trend line of women speakers at AHNS conferences and proportion of women entering head and neck fellowships.
- They provide a nice review on gender disparities in otolaryngology and the changing landscape with increased awareness of these issues, avoiding the pitfall of simply stating the need for gender equity but rather shedding light on the disparity among the proportion of women representation in the speaker role as it relates to the evolving increase in women entering the field.

Weaknesses

- Gender was defined in binary terms and based on publicly available pronouns for the speakers, but does not include or differentiate those who may not identify with the binary male or female categorization.
- Specific factors, such as program theme or focus, that may have influenced who would be invited as speakers were not addressed, which may be a confounding factor that impacts whether women experts in the field were available for invitation.

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Robotic surgery may improve survival for T1 and T2 tumors of the hypopharynx: An NCDB cohort study

Jeroen Meulemans, Pierre Delaere, Vincent Vander Poorten

*From the **Oral Oncology**. October 2021*

Background: Hypopharyngeal cancer is associated with poor survival. Robotic surgery is emerging as a treatment for hypopharyngeal tumors, but no rigorous data are available to assess its effect on survival.

Methods: The National Cancer Database (NCDB) was used to identify patients with T1 and T2 hypopharyngeal tumors undergoing robotic surgery, laser surgery, and primary radiation with or without chemotherapy from 2010 to 2016. All adult patients with available staging and no distant metastasis were included.

Results: We compared 57 patients undergoing robotic surgery, 236 undergoing laser surgery, and 5,742 undergoing primary radiation. Compared to laser surgery, patients undergoing robotic surgery were significantly more likely to have negative margins, neck dissection, lower incomes, and care at an academic center. Rates of robotic surgery also significantly increased from 2010 to 2015. After multivariate regression, robotic surgery was associated with significantly improved overall survival compared to laser surgery and primary radiation.

Conclusions: Robotic surgery improves overall survival for T1 and T2 hypopharyngeal tumors compared to laser surgery and primary radiation in this NCDB cohort. This effect may be mediated by decreased positive margin rates relative to laser surgery. Rates of hypopharyngeal robotic surgery are expected to increase with wider adoption of robotic platforms and may improve overall survival rates for hypopharyngeal cancer.

Summary statements

- TORS was associated with improved overall survival compared to TLM and radiation for T1 and T2 hypopharynx cancers, independent of nodal involvement.
- Improved survival is likely associated with fewer positive margins compared to TLM (13% for TORS vs. 32% for TLM)
- Higher rates of neck dissection occurred in TORS-treated patients (nearly 2 times higher than TLM), and likely contributed to improved survival in both N-negative and N-positive patients.
- Decreased rates of chemotherapy for TORS (19.3%) and TLM (27.1%) compared to radiation (74.5%).

Strengths

- This study provided a comprehensive evaluation of treatment options and outcomes for early T-stage hypopharynx cancer using a national database

- Demonstrates better survival for patients with tumors amenable for TORS; therefore, this paper introduces an important consideration for treatment options with small hypopharynx tumors with and without nodal involvement.
- Comparison of TORS versus TLM showing improved margin control and survival with TORS.

Weaknesses

- Retrospective review
- Only 57 TORS patients and 236 TLM patients compared to 5742 radiation patients
- Selection bias for surgical patients with tumors in more favorable locations, potentially healthier patients
- No disease-specific survival data, functional outcomes, pathology details (PNI and ENE), or recurrence data available in NCDB

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Revisiting the Recommendation for Contralateral Tonsillectomy in HPV-Associated Tonsillar Carcinoma

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*From **Otolaryngology Head and Neck Surgery.** June 2021*

Objective: Objective: Despite epidemiologic evidence that second primaries occur infrequently in HPV (human papillomavirus)-associated oropharyngeal squamous cell carcinoma, recent recommendations advocate for elective contralateral palatine tonsillectomy. We aimed to study this discordance and define the necessary extent of up-front surgery in a large contemporary cohort with long-term follow-up treated with unilateral transoral robotic surgery. We hypothesized that second primaries are discovered exceedingly rarely during follow-up and that survival outcomes are not compromised with a unilateral surgical approach.

Study design: Retrospective cohort analysis.

Setting: Tertiary care academic center between 2007 and 2017.

Methods: Records for patients with p16-positive oropharyngeal squamous cell carcinoma of the tonsil and workup suggestive of unilateral disease who underwent ipsilateral transoral robotic surgery were analyzed for timing and distribution of locoregional recurrence, distant metastases, and second primary occurrence as well as survival characteristics.

Results: Among 295 included patients, 21 (7.1%) had a locoregional recurrence; 17 (5.8%) had a distant recurrence; and 3 (1.0%) had a second primary during a median follow-up of 48.0 months (interquartile range, 29.5-62.0). Only 1 (0.3%) had a second primary found in the contralateral tonsil. The 2- and 5-year estimates of overall survival were 95.5% (SE, 1.2%) and

90.1% (SE, 2.2%), respectively, while the 2- and 5-year estimates of disease-free survival were 90.0% (SE, 1.8%) and 84.7% (SE, 2.3%).

Conclusion: Second primary occurrence in the contralateral tonsil was infrequent, and survival outcomes were encouraging with unilateral surgery. This provides a rationale for not routinely performing elective contralateral tonsillectomy in patients whose workup suggests unilateral disease.

Summary statement:
This is a single institution retrospective cohort study of 295 patients undergoing unilateral and 19 patients undergoing bilateral tonsillectomy for p16 positive oropharyngeal squamous cell carcinoma. Second primary in the contralateral tonsil was a very infrequent occurrence (1/295 patient, 0.3%) in patients undergoing unilateral tonsillectomy, but more frequent (2/7 patients, 28.6%) in patients in primary unknown disease. Thus, in patients with clinically unilateral disease, unilateral tonsillectomy did not impact prognosis and contralateral disease was exceedingly rare.

Strengths

- Single institution study with a homogenously treated patient population. Treatment algorithms well defined, including adjuvant treatment.
- Large cohort of patients with unilateral tonsillectomy with at least 2 years follow-up allowing for meaningful statistical analysis.

Weaknesses

- Small cohort of 19 patients undergoing bilateral tonsillectomy obscures results slightly as cohort is not large enough to draw conclusions.
- Unable to draw conclusions about bilateral tonsillectomy in patients with primary unknown disease given small sample size (7 patients) despite the higher frequency of bilateral tonsillar disease on pathology.

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Barriers to Obtaining a Timely Diagnosis in Human Papillomavirus–Associated Oropharynx Cancer

Emily E Karp, Linda X Yin, Eric J Moore, Anna J Elias, Thomas J O'Byrne, Amy E Glasgow, Elizabeth B Habermann, Daniel L Price, Jan L Kasperbauer, Kathryn M Van Abel

*From **Otolaryngology Head and Neck Surgery.** August 2021*

Objective: Failure to recognize symptoms of human papillomavirus-associated oropharyngeal squamous cell carcinoma (HPV(+)OPSCC) at presentation can delay diagnosis and treatment. This study aims to identify patient factors and provider patterns that contribute to delayed diagnosis.

Study design: Retrospective case series.

Setting: Tertiary care center.

Methods: Patients with HPV(+)OPSCC receiving intent-to-cure treatment from 2006 to 2016. Clinical data, workup, and care timelines were abstracted. Univariate and multivariable linear regressions were performed to determine associations.

Results: Of 703 included patients, 627 (89%) were male, and mean (SD) age at diagnosis was 59 (9) years. The mean (SD) delay to diagnosis was 148.8 (243.51) days, with an average delay of 63 (154.91) days from symptom onset to first presentation and 82.8 (194.25) days from first presentation to diagnosis. Most patients visited at least 2 providers (n = 546, 78%) before diagnosis and saw their primary care physician at first presentation (n = 496, 71%). The most common imaging and biopsy obtained before diagnosis was neck computed tomography (n = 391, 56%) and neck fine-needle aspiration (n = 423, 60%), respectively. On multivariable linear regression, being a homemaker, being a current smoker, seeing 3 or more providers, and getting a magnetic resonance imaging scan were associated with significant delays in diagnosis ($P < .01$, all). Treatment with antibiotics and a suspicion for HPV(+)OPSCC at first presentation were associated with decreased delays in diagnosis ($P < .01$, both).

Conclusions: Patient delays in seeking medical attention and provider delays in recognizing the appropriate diagnosis both contribute to delays of care in HPV(+)OPSCC. Improved patient and provider education is necessary to expedite the diagnosis of HPV(+)OPSCC.

Summary statement:
This single institution retrospective study describes 703 patients with HPV-mediated oropharyngeal squamous cell carcinoma and their path to diagnosis. Mean time from symptom onset to diagnosis was 5 months, with most patients seeing a primary care as their first provider. Patients who were homemakers, current smokers, underwent work-up with MRI, and had seen more providers had increased delays in diagnosis.

Strengths:

- Large cohort with highly granular data allowing for detailed description of patients' pathways to diagnosis
- Answers a pertinent question of reasons for delayed diagnoses to allow for future interventions to improve access to care in patients with HPV-related oropharyngeal squamous cell carcinoma

Weaknesses:

- Due to the retrospective nature of the study, specific dates are unable to be obtained reliably and estimates are based on the month of occurrence. With the mean time from symptom onset to diagnosis being 5 months, these estimates may result in significant differences in the findings
- As this study was completed in a single institution, findings may not be applicable to other practices as referral sources and practice patterns likely vary significantly with practice context.

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Positron Emission Tomography–Computed Tomography Imaging, Genomic Profile, and Survival in Patients with Head and Neck Cancer Receiving Immunotherapy

Conall W R Fitzgerald, Cristina Valero, Christina E Swartzwelder, Luc G T Morris

From ***JAMA Otolaryngology Head and Neck Surgery.*** *July 2021*

Abstract:
This study analyzes the association between maximum standardized uptake value on positron emission tomography–computed tomography and survival in patients with head and neck cancer who are receiving immune checkpoint inhibitor drugs.

Summary statements:

- Clinical and genomic data from 98 patients receiving immune checkpoint inhibitor (ICI) drugs for mucosal head and neck squamous cell carcinoma (HNSCC) were analyzed to determine whether there was an association between SUVmax on pre-ICI treatment PET-CT and overall and progression-free survival.
- High SUVmax (defined as above the median of SUVmax=11) was associated with worse overall survival (HR 1.65, 95% CI, 1.03-2.66, p=0.04), but not with progression-free survival (HR 0.92, 95% CI, 0.60-1.40, p=0.69) or the probability of tumor response to ICI (20.4% vs 26.5%, p=0.046).
- SUVmax was not associated with tumor mutation burden (TMB) but found to be significantly associated with pretreatment peripheral blood neutrophil-to-lymphocyte (NLR) ratio (r=0.32, p=.002)
- High SUVmax was found to be associated with poorer prognosis and significantly associated with NLR, a surrogate marker for systemic inflammation and has been reported to have prognostic and predictive value in HNSCC patients treated with ICI. These findings suggest further investigations are warranted to explore the correlation between systemic inflammation and tumor metabolic imaging tests to provide prognostic information for HNSCC patients treated with ICI.

Strengths:

- This study highlights a new and evolving window of inquiry in identifying other prognostic indicators to help predict survival outcomes and response to treatment.
- The study included a relatively large patient cohort and analyzed additional prognostic factors such as NLR and TMB to evaluate possible broader applications of utilizing SUVmax measurements.

Weaknesses:

- This is a single institution study with a relatively large patient cohort, however including an even larger patient cohort and broadening to multi-institutional sites to account for variations in imaging techniques and a more diverse patient cohort may allow for broader generalizability of results.

- There are a number of factors that can contribute to SUVmax that may impact the overall value which must be taken into account when analyzing the results.
- Other factors contributing to survival outcomes were not taken into account in this analysis, such as medical comorbidities and other patient-specific factors which may impact the overall findings.

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