# Sialadenopathy: A commonly missed diagnosis and important impact on oral and overall health

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#### Logan Bach (CRC)

X No, nothing to disclose

Yes, please specify:

#### **Deborah Saunders (PI)**

No, nothing to disclose

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Company Name	Honoraria/ Expenses	Consulting/ Advisory Board	Funded Research	Royalties/ Patent	Stock Options	<i>Ownership/ Equity Position</i>	Employee	<i>Other</i> (please specify)
Amgen	Х		Х					
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# Background on the NECC/HSN Dental Oncology Clinic



- The department of Dental Oncology at NECC/HSN offers access to oral medicine and oral pathology services for the northeast.
- On average, the program receives 600 referrals annually from physicians, dentists, and other healthcare professionals of the north for assessment and treatment of complex dental and oral mucosal conditions.
- Between 2015 and 2019, the department of Dental Oncology received 2521 external referrals.

## Sialadenopathy and Xerostomia

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- Sialadenopathy in oral medicine is a term used to describe any condition related to the dysfunction of the salivary glands, and is an important indicator of oral and overall health.
- Sialadenopathies can result in xerostomia (dry mouth) which is one of the most common oral health problems seen in the department of Dental Oncology at NECC/HSN.
- Sialadenopathy can have many causative factors, including, but not limited to:
  - Polypharmacy: medication-induced salivary gland dysfunction<sup>1</sup>
  - Sjogren's syndrome: autoimmune disorder
  - Head and neck radiation

<sup>1</sup>Villa A, Wolff A, Aframian D, et al. (2015) World workshop on oral medicine VI: a systematic review of medication-induced salivary gland dysfunction: prevalence, diagnosis, and treatment. *Clin Oral Investig.* 



### **Impact of Research**



- Xerostomia caused by sialadenopathy can impact the health of the oral cavity with respect to decay risk, tooth loss, periodontal disease, oral candidiasis, dysgeusia, and oral burning sensations; leading to impacts on overall health and quality of life.<sup>1</sup>
- Salivary gland hypofunction and xerostomia can also result in necessary diet adaptations that lead to poor diet quality, difficulty speaking, and may be a barrier to exercise and sleep.<sup>2</sup>
- We hope that this research will bring light to the importance of healthy salivary function and impacts on oral and overall health, and increase in quality of life for our patients.

<sup>1</sup>Villa A, Wolff A, Aframian D, et al. (2015) World workshop on oral medicine VI: a systematic review of medication-induced salivary gland dysfunction: prevalence, diagnosis, and treatment. *Clin Oral Investig.* <sup>2</sup>Mercadante V, Jensen SB, Smith DK, et al. (2021) Salivary gland hypofunction and/or xerostomia induced by nonsurgical cancer therapies: ISOO/MASCC/ASCO guideline. Alexandria, VA: *American Society of Clinical Oncology.* 





The purpose of this study is to identify the common oral findings in patients referred for oral medicine consults in northeastern Ontario. The top three oral findings were identified. These findings can help address potential gaps in continuing medical and dental education for the community practitioner.





Figure 1. Flow chart, eligibility screening for inclusion

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Figure 2. The three most prevalent oral medicine diagnoses included: odontogenic (13.4%) (n=331),

sialadenopathy (11.6%) (n=286), and oral lichen planus (10.2%) (n=253).





**Figure 3**. 286 patients were referred to the NECC/HSN dental oncology clinic and given a diagnosis of sialadenopathy. 49.7% were originally referred by physicians (n=142). 47.2% were originally referred by dentists (n=135). 1.1% were originally referred by nurse practitioners (n=3). 0.3% were self-referred (n=1). 1.7% were referred by other healthcare professionals (n=5).







**Figure 4.** 21.0% (n=60) of the sialadenopathy patients were diagnosed with Sjogren's syndrome. 58.0% (n=166) of the sialadenopathy patients suffer from polypharmacy-induced xerostomia. 21.0% (n=60) of the sialadenopathy patients had other conditions listed as the cause for their diagnosis









**Figure 5.** 23.4% (n=67) of patients who were given a diagnosis of sialadenopathy were originally referred for suspect sialadenopathy. 76.6% (n=219) of patients were not originally referred for sialadenopathy, but were given this diagnosis once in the clinic.



### **Key Interpretations and Considerations**

- Although sialadenopathies are the second most common oral medicine diagnosis, they are often not the primary reason for referral to the oral medicine program.
- Most commonly, oral mucosal conditions occur simultaneously with other conditions.
- There is a discrepancy between the patients who are specifically referred for a sialadenopathy-related concern and those who are given a final diagnosis of sialadenopathy.
- As healthy salivary function is of importance to overall health and QOL, emphasis should be placed on its diagnosis and management.
- Continuing education in medicine and dentistry on identification and importance of healthy salivary function can have a positive impact on QOL and overall health.



# Thank you.

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