Sex Differences in Head and Neck Cancer Risk Among Dermatomyositis Patients: Retrospective U.S Cohort Study

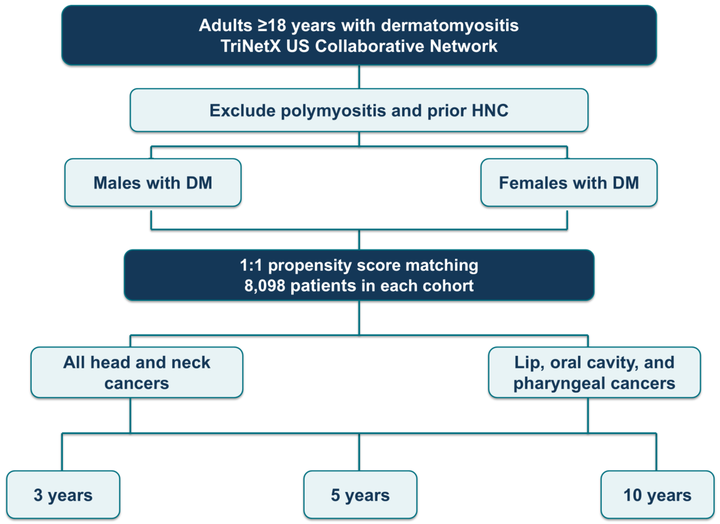
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Background

Dermatomyositis (DM) is an autoimmune inflammatory myopathy characterized by prominent muscle weakness, characteristic skin findings, and visceral organ involvement. It is associated with an increased risk of various malignancies, but head and neck cancer (HNC) risk among US patients with DM remains poorly characterized. A prior US study observed HNC only in male patients, raising the possibility of a sex disparity. We compared HNC risk over time in propensity score-matched male and female cohorts with DM.

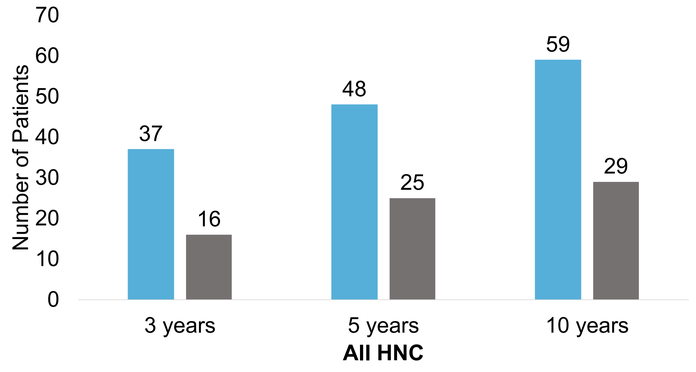
Study Objective: To compare HNC risk between male and female adults with DM.

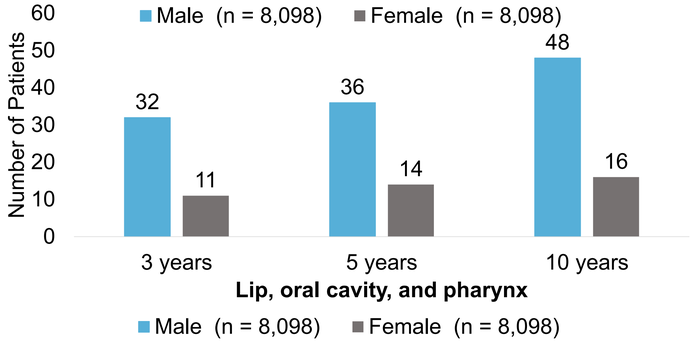
Methods

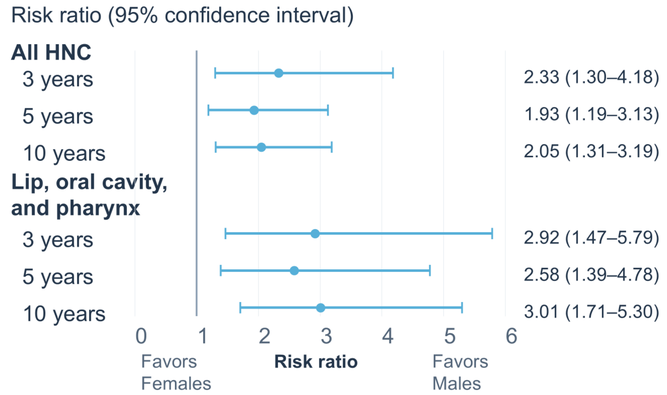


*Matched for age, race, tobacco use, and alcohol use.

Results







Conclusion

Among adults with DM, male patients had approximately twice the matched risk of HNC across 3, 5, and 10 years. The risk of lip, oral cavity, and pharyngeal cancer was approximately three times higher in male patients. These findings highlight the need for overall cancer surveillance and sex-specific cancer surveillance strategies in DM management.

References

1. DeWane ME, Waldman R, Lu J. Dermatomyositis: Clinical features and pathogenesis. *Journal of the American Academy of Dermatology*. 2020;82(2):267-281. doi:10.1016/j.jaad.2019.06.1309
2. Robinson AB, Reed AM. Clinical features, pathogenesis and treatment of juvenile and adult dermatomyositis. *Nat Rev Rheumatol*. 2011;7(11):664-675. doi:10.1038/nrrheum.2011.139
3. Chen YJ, Wu CY, Huang YL, Wang CB, Shen JL, Chang YT. Cancer risks of dermatomyositis and polymyositis: a nationwide cohort study in Taiwan. *Arthritis Res Ther*. 2010;12(2):R70. doi:10.1186/ar2987
4. Semprini J, Pagedar NA, Boakye EA, Osazuwa-Peters N. Head and Neck Cancer Incidence in the United States Before and During the COVID-19 Pandemic. *JAMA Otolaryngol Head Neck Surg*. 2024;150(3):193-200. doi:10.1001/jamaoto.2023.4322
5. Oldroyd AGS, Callen JP, Chinoy H, et al. International Guideline for Idiopathic Inflammatory Myopathy-Associated Cancer Screening. *Nat Rev Rheumatol*. 2023;19(12):805-817. doi:10.1038/s41584-023-01045-w

Acknowledgements

I would like to acknowledge my mentors and Thomas Jefferson University for supporting this research.

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