Bilateral synchronous tonsillar squamous cell carcinoma associated with human papillomavirus

Dr Samuel Leedman, Dr Thomas Hendriks, Dr Aaron Esmaili, Mr Travis Leahy

Department of Otolaryngology Head and Neck Surgery, Fiona Stanley Hospital, Perth, Australia

Introduction

The incidence of human papilloma virus related oropharyngeal carcinoma is increasing, the tonsillar fossa is a common location. Bilateral synchronous tonsillar squamous cell carcinoma (SCC) however is rare.

Case Presentation

A 53-year-old man presented to the outpatient clinic with an incidentally noted left level IIb neck mass. This was found on examination in emergency after an orbital fracture sustained from a mechanical fall.

On review, this had likely been present for 3-4 weeks with 10kg associated weight loss. He denied any other associated symptoms, including dys- or odyno-phagia, globus sensation, voice, visual or auditory change, night sweats or cranial neuropathies. He had otherwise been totally well in the preceding months before first noticing the mass.

His past medical history was remarkable for early emphysema, hepatitis C, depression and chronic lower back pain. Despite his diagnosis of emphysema, he continued to smoke heavily, with a 40-pack year history.

Examination revealed a 4cm left level IIb lymph node mass, tethered to deep structures but with no skin involvement. Bilateral firm grade 2 tonsils and a normal fiberoptic nasal endoscopy. No mucosal lesions.

PET scan and computed tomography imaging revealed bilateral enlarged FDG avid palatine tonsils and a left neck nodal mass. USS FNA of the left IIb node confirmed metastatic SCC.

Contact information

Dr Samuel Leedman | ENT Registrar

Samuel.Leedman@health.wa.gov.au

Fiona Stanley Hospital, Western Australia, Australia

He underwent an urgent panendoscopy and bilateral tonsillectomy which revealed bilateral p16+ SCC tonsillar primaries.

He was referred for concurrent chemo-radiotherapy. Whilst awaiting treatment, progression of his left neck disease led to compression of the internal jugular vein and carotid sheath. He developed symptomatic bradycardia and required a pacemaker.

He is currently undergoing palliative intent chemo-radiotherapy.

Discussion

Bilateral synchronous human papilloma virus related (p16+) tonsillar SCC is rare, with less than 30 reported cases in the literature[1-4]. Of those, seven are reported in one retrospective case series by Rokkjaer et al. from Denmark[4]. They looked at the Danish Head and Neck cancer database for all tonsil primary SCCs over a 15 year period and found an incidence of bilateral tonsil primary SCC of 0.03%[4].

There is increasing detection of these cases with the use of PET/CT and routine bilateral tonsillectomy for cancer of unknown primary. These cases may be underreported and this case serves as a reminder to always consider the possibility of bilateral tonsillar carcinoma in these patients.

References

1. Theodoraki MN, Veit JA, Hoffmann TK, Greve J. Synchronous bilateral tonsil carcinoma: case presentation and review of the literature. Infect Agent Cancer. 2017;12:38.
2. Roeser MM, Alon EE, Olsen KD, Moore EJ, Manduch M, Wismayer DJ. Synchronous bilateral tonsil squamous cell carcinoma. Laryngoscope. 2010;120 Suppl 4:S181.
3. Mannina EM, Pejavar SM, Glastonbury CM, van Zante A, Wang SJ, Yom SS. Diagnosis of Bilateral Tonsil Cancers via Staging PET/CT: Case Report and Review. Int J Otolaryngol. 2011;2011:928240.
4. Rokkjaer MS, Klug TE. Prevalence of synchronous bilateral tonsil squamous cell carcinoma: A retrospective study. Clin Otolaryngol. 2018;43(1):1-6.