Commentary Mitzman

See Article page 161.

Check for updates

Commentary: Sunlight, lasers, or knives? How to treat typical carcinoid tumors

Brian Mitzman, MD

The world is changing. Not too long ago, open surgical resection was the mainstay of management for endobronchial tumors. Treatments were limited for those who were not considered surgical candidates. Our current era affords us numerous modalities for the treatment of low-grade endobronchial lesions, ranging from minimally invasive surgical techniques to advanced endobronchial ablative therapies. In this volume of *JTCVS Techniques*, Shah and colleagues² present a case series of 2 patients with endobronchial typical carcinoid who were treated with photodynamic therapy.

Photodynamic therapy (PDT) has been approved for the treatment of non–small cell lung cancer since 1993.³ Using a tumor-localizing photosensitizing agent, a specific wavelength of light is used for activation, leading to photodamage to the tumor tissues. PDT has been shown to be quite successful for typical carcinoid tumors in the limited published literature available. Patients with complete obliteration of tumor and negative posttreatment biopsy have been shown to be disease free for up to 10 years.⁴

Shah and colleagues² describe 2 patients treated with PDT for endobronchial typical carcinoid. Both patients were treated with porfimer sodium before light exposure, followed by 200 J/cm of treatment. The first patient had 4 total PDT sessions over 2 weeks, in conjunction with cryotherapy debridement. The second patient initially did not respond to cryotherapy, and then had several sessions of PDT. At 36 months, neither patient had evidence of recurrence.

From the Division of Cardiothoracic Surgery, University of Utah Health, Salt Lake City, Utah.

Disclosures: Dr Mitzman reported Consultant and Proctor, Intuitive Surgical.

JTCVS Techniques 2022;15:164

2666-2507

Copyright © 2022 The Author(s). Published by Elsevier Inc. on behalf of The American Association for Thoracic Surgery. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). https://doi.org/10.1016/j.xjtc.2022.07.003



Brian Mitzman, MD

CENTRAL MESSAGE

With careful patient selection, endobronchial photodynamic therapy appears to have high success rates and low risk for typical carcinoid tumors of the bronchus.

With such high success rates, the ability for low-risk repeat of treatment if there is a recurrence, and lower risk compared with other types of endobronchial therapy, should PDT be first-line therapy for purely endobronchial typical carcinoids? There is definitely an argument to be made. Although most of the data are limited case series, the anecdotes of success are becoming more widespread as the years press on.

References

- Gosain R, Mukherjee S, Yendamuri SS, Iyer R. Management of typical and atypical pulmonary carcinoids based on different established guidelines. *Cancers*. 2018;10:510.
- Shah VN, Berkheim DB, Lackner RP, Trujillo KP. Photodynamic therapy with cryotherapy for endobronchial typical carcinoid. J Thorac Cardiovasc Surg Tech. 2022;15:161-3.
- Dougherty TJ, Gomer CJ, Henderson BW, Jori G, Kessel D, Korbelik M, et al. Photodynamic therapy. J Natl Cancer Inst. 1998;90:889-905.
- Kurman JS, Pastis NJ, Murgu SD. Photodynamic therapy and its use in lung disease. Curr Pulmonol Rep. 2019;8:215-21.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Received for publication July 2, 2022; accepted for publication July 5, 2022; available ahead of print July 7, 2022.

Address for reprints: Brian Mitzman, MD, Division of Cardiothoracic Surgery, University of Utah, 30 North 1900 East, #3C127 SOM, Salt Lake City, UT 84132 (E-mail: Brian.mitzman@hsc.utah.edu).