

## CLINICAL IMAGE

# An enlarging neck mass with dyspnea and left finger pain in a 63-year-old woman

Thanh D. Hoang<sup>1,2</sup>  | Andrea N. Snitchler<sup>3</sup> | Mohamed K.M. Shakir<sup>1,2</sup>

<sup>1</sup>Division of Endocrinology, Department of Medicine, Walter Reed National Military Medical Center, Bethesda, MD, USA

<sup>2</sup>Division of Endocrinology, Department of Medicine, Uniformed Services University of Health Sciences, Bethesda, MD, USA

<sup>3</sup>Department of Pathology, Walter Reed National Military Medical Center, Bethesda, MD, USA

## Correspondence

Thanh D. Hoang, Division of Endocrinology, Walter Reed National Military Medical Center, 8901 Wisconsin Ave, Bethesda, MD 20889.  
Email: tdhdthanh@gmail.com

## Abstract

We described a rare presentation of papillary thyroid cancer metastasized to left finger. This case highlights the importance of an early and effective engagement of multidisciplinary team approach to optimize patient care and that papillary thyroid cancer can occasionally pursue an aggressive, lethal course.

## KEYWORDS

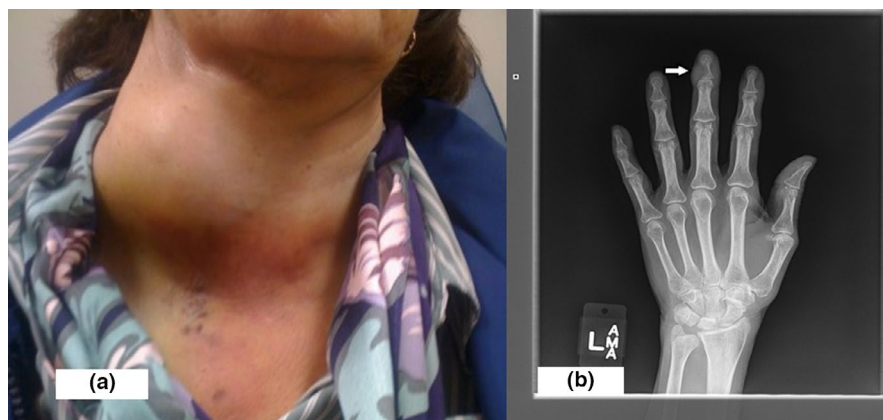
metastasis to left finger, papillary thyroid cancer

## 1 | CLINICAL VIGNETTE

A 63-year-old woman presented with an enlarging neck mass for 18 months. She reported exertional dyspnea, weight loss, and third left finger pain. Physical examination showed a 6cm firm right neck mass, with skin changes concerning for impending ulceration (Figure 1A). Fine-needle aspiration of the neck mass showed hyper-cellularity with nuclear

molding, fine powdery chromatin, and intranuclear inclusions (Figure 2). X-ray showed an erosive mass to the third distal phalanx (Figure 1B).

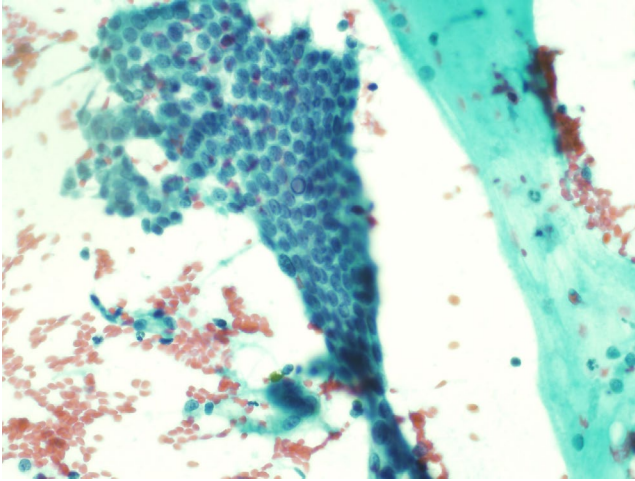
Papillary thyroid cancer (PTC) metastasis to distal phalanges is extremely rare.<sup>1,2</sup> The prognosis is poorer in patients with advanced age, larger tumors, soft-tissue invasion, distant metastases, and high-risk features (tall cell, insular, hobnail variants, etc).<sup>1,2</sup> In our patient, the neck CT showed a large



**FIGURE 1** A, showing a large right neck mass with skin changes concerning for impending ulceration. B, X-ray of the left finger showing an erosion

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.



**FIGURE 2** cytological diagnosis by fine-needle aspiration of the right neck mass which showed hyper-cellularity with nuclear molding, fine powdery chromatin, nuclear membrane irregularities, and rare intranuclear inclusions

thyroid nodule with calcifications, invading sternocleidomastoid muscle with tracheal mass effect and bilateral pulmonary nodules. Despite extensive counseling, she chose natural, holistic route. Several months later, the mass was not resectable due to its proximity to great vessels and potential tracheal collapse. She underwent EBRT to the thyroid mass and left third finger, however, she passed away 1 month later. This case highlights the importance of early and effective treatment and that PTC may occasionally pursue an aggressive and lethal course.

#### ACKNOWLEDGMENTS

The identification of specific products or scientific instrumentation is considered an integral part of the scientific endeavor and does not constitute endorsement or implied endorsement on the part of the author, DoD, or any component agency. The views expressed in this manuscript are

those of the authors and do not reflect the official policy of the Department of Defense or the US Government. Published with written consent of the patient.

#### CONFLICT OF INTEREST

None declared.

#### AUTHOR CONTRIBUTIONS

Thanh D. Hoang, DO—Author; Adrea Snitchler, MD—reviewer, providing pathology slides; Mohamed KM Shakir, MD—reviewer.

#### ETHICAL APPROVAL

The manuscript has been reviewed and approved by the IRB and Public Affairs Office.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

#### ORCID

Thanh D. Hoang  <https://orcid.org/0000-0001-7437-5604>

#### REFERENCES

1. Iñiguez-Ariza NM, Bible KC, Clarke BL. Bone metastases in thyroid cancer. *J Bone Oncol.* 2020;21:100282.
2. Prete A, Borges de Souza P, Censi S, Muzza M, Nucci N, Sponziello M. Update on fundamental mechanisms of thyroid cancer. *Front Endocrinol.* 2020;11:102.

**How to cite this article:** Hoang TD, Snitchler AN, Shakir MKM. An enlarging neck mass with dyspnea and left finger pain in a 63-year-old woman. *Clin Case Rep.* 2021;9:e04098. <https://doi.org/10.1002/ccr3.4098>