

Parathyromatosis

Sir,

I read with great interest an article entitled “Parathyromatosis following endoscopic parathyroid surgery: A rare occurrence” by Aggarwal *et al.*^[1] It is an interesting and unusual case. I would like to congratulate all the authors for reporting such a nice case and indeed an excellent management in such difficult

case. However, I have a few observations in this connection which you may find useful. I would also like to add some interesting point about this condition.

The authors had mentioned that index case was the first case of parathyromatosis following endoscopic parathyroidectomy for benign adenoma.^[1] I would like to state that such incident had

already been reported and diagnosed by fine-needle aspiration cytology coupled with immunohistochemistry.^[2] Another case following endoscopic parathyroidectomy was also reported by Wu *et al.*^[3] It has also been mentioned that in the minimally invasive technique, dissection must be performed carefully to avoid nerve injury and rupture of the capsule which can cause parathyromatosis.

A differential diagnosis between parathyroid carcinoma and parathyromatosis can be challenging during surgery. Parathyromatosis usually present as small and numerous nodules and is often surrounded by dense fibrous tissue due to prior operative intervention, which gives the false impression of a parathyroid carcinoma.

Some immunohistochemical studies have been conducted to distinguish parathyroid carcinoma from benign masses. A recent study indicates that molecular profiles of parathyromatosis are similar to those of benign parathyroid tumors concerning expression of parafibromin expression, Rb expression, and galectin-3.^[4]

Parathyromatosis shows positivity for neuroendocrine markers chromogranin and synaptophysin and is positive for Parathyroid hormone (PTH) and cytokeratin (CAM 5.2) and negative for thyroid transcription factor-1.^[5]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Vipul D. Yagnik

Department of Surgical Gastroenterology, Ronak Endo-Laparoscopy and General Surgical Hospital, Patan, Gujarat, India


Address for correspondence:

Dr. Vipul D. Yagnik,
77, Siddhraj Nagar, Rajmahal Road, Patan - 384 265, Gujarat, India.
E-mail: vipul.yagnik@gmail.com.

REFERENCES

1. Aggarwal A, Wadhwa R, Aggarwal V. Parathyromatosis following endoscopic parathyroid surgery: A Rare occurrence. *Indian J Endocrinol Metab* 2017;21:641-2.
2. Sharma S, Dey P, Gude G, Saikia UN. Parathyromatosis – A rare occurrence along the endoscopic tract detected on fine needle aspiration cytology. *Diagn Cytopathol* 2016;44:1125-7.
3. Wu TJ, Wang YT, Chang H, Lin SH. Parathyromatosis. *Kidney Int* 2012;82:1140.
4. Fernandez-Ranvier GG, Khanafshar E, Tacha D, Wong M, Kebebew E, Duh QY, *et al.* Defining a molecular phenotype for benign and malignant parathyroid tumors. *Cancer* 2009;115:334-44.
5. Erickson LA. Endocrine pathology. In: Cheng L, Bostwick DG, editors. *Essential of Anatomic Pathology*. Switzerland: Springer; 2016. p. 975-1026.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijem.in
	DOI: 10.4103/ijem.IJEM_548_17

How to cite this article: Yagnik VD. Parathyromatosis. *Indian J Endocr Metab* 2018;22:173-4.

© 2018 Indian Journal of Endocrinology and Metabolism | Published by Wolters Kluwer - Medknow