DOI: 10.1002/ccr3.6041

### CASE IMAGE

# Giant multinodular goiter for 24 years; hidden in a village in Western Nepal

Brihaspati Sigdel<sup>1,2</sup> | Bhima Neupane<sup>3</sup> | Amrit Pokhrel<sup>2</sup> | Prakash Nepali<sup>4</sup>

<sup>1</sup>Department of Otolaryngology & Head and Neck Surgery, Gandaki Medical College, Pokhara, Nepal

<sup>2</sup>Metrocity Hospital, Pokhara, Nepal

<sup>3</sup>Department of Anatomy, Manipal College of Medical Sciences, Pokhara, Nepal

<sup>4</sup>Bhimad Primary Health Centre, Bhimad, Tanahun, Nepal

### Correspondence

Brihaspati Sigdel, Department of Otolaryngology & Head and Neck Surgery, Gandaki Medical College Teaching Hospital, Pokhara, Nepal and Metrocity Hospital, Pokhara, Nepal. Email: brihassig1@gmail.com

### Abstract

Here, we present the case of a giant multinodular goiter with retrosternal extension in an old lady with dyspnea for 3 months. The patient was treated with microscopic-assisted total thyroidectomy without any postoperative complications.

### KEYWORDS

giant multinodular goiter, microscopic-assisted total thyroidectomy, village

#### 1 **CASE REPORT**

A 67-year-old woman presented at the health camp organized in the Kihun village by Bhawana Foundation, Nepal, with complaints of painless neck swelling for 24 years and shortness of breath for 3 months. Shortness of breath was gradually progressive and aggravated while sleeping in supine position. On neck examination, a large left greater than right mass was present. The mass was non-tender, non-pulsatile, and moved with deglutition (Figure 1).

Thyroid function tests and serum calcium were within normal limits. Ultrasound of the neck showed multiple thyroid nodules and cystic lesions. The CECT neck revealed heterogeneously enhancing lesions extending retrosternally (Figure 2A,B). FNAC was suggestive of atypia of undetermined significance.

The patient underwent microscopic-assisted total thyroidectomy under general anesthesia. Her postoperative recovery was uneventful and relieved her shortness of breath. The patient was discharged on the sixth



FIGURE 1 Showing neck mass in the anterior aspect of the neck

postoperative day with levothyroxine replacement therapy. The mass removed from the neck weighed 461.5 g and measured approximately 14 cm (Figure 3). Microscopic examination was consistent with multinodular goiter.

\_\_\_\_\_ 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. © 2022 The Authors. Clinical Case Reports published by John Wiley & Sons Ltd.

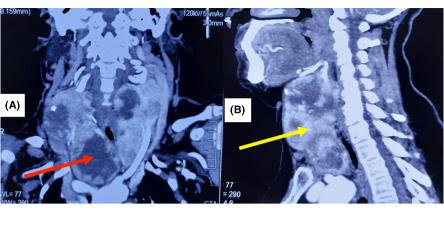
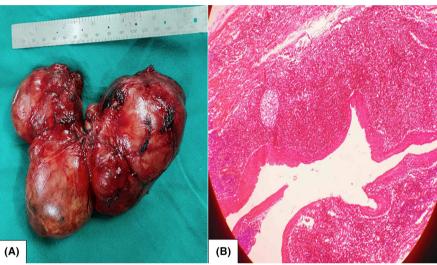


FIGURE 2 CECT neck coronal view (A) showing heterogeneous mass involving both the lobes of thyroid with retrosternal extension and splaying brachiocephalic vein. (Red arrow) Sagittal view (B) showing mass from sternum to mandible and compressing airway. (Yellow arrow)

**FIGURE 3** Gross (A) and microscopic (B) feature of excise thyroid mass suggestive of multinodular goiter



Benign multinodular goiter leading to airway compromise has become a rare clinical entity.<sup>1</sup> Universal salt iodization, cosmetic concern, and improved surgical technique with minimal disfigurement have led to the disappearance of large goiter from modern clinical practice. The definitive management of multinodular goiter includes total thyroidectomy.<sup>2</sup>

### AUTHOR CONTRIBUTIONS

BS involved in diagnosis, treatment, and conceptualization of study. BS, BN, AP, and PN involved in manuscript preparation, editing, and proofreading of final version of manuscript.

ACKNOWLEDGMENT None.

**CONFLICT OF INTEREST** 

We declare no competing interests.

**DATA AVAILABILITY STATEMENT** Data available on request.

### CONSENT

Written informed consent was obtained from the patient to publish this report.

## ORCID

Brihaspati Sigdel https://orcid. org/0000-0002-8546-6699 Amrit Pokhrel https://orcid.org/0000-0001-5602-0869 Prakash Nepali https://orcid.org/0000-0002-7469-1436

### REFERENCES

- Kumar KV, Saini M, Kapoor U, Banga P. Massive multinodular goiter with stridor. *Indian J Endocrinol Metab.* 2012;16(4):664-665. doi:10.4103/2230-8210.98043
- Makay Ö. Less than total thyroidectomy for goiter: when and how? Gland Surg. 2017;6(1):S49-S58. doi:10.21037/gs.2017.10.02

**How to cite this article:** Sigdel B, Neupane B, Pokhrel A, Nepali P. Giant multinodular goiter for 24 years; hidden in a village in Western Nepal. *Clin Case Rep.* 2022;10:e06041. doi: <u>10.1002/ccr3.6041</u>