

# Medialisation of internal carotid artery in the neck-a case report of radiology

## Abstract

ICA course aberration though rarely seen but is important as it poses threat to minor as well major surgical intervention with risk of potential fatal haemorrhage in case of accidental injury. We present a case of 23 year old female patient who is known case of Non-Hodgkins lymphoma an also present with pulsating mass on left side of neck.<sup>1,2</sup>

Volume 9 Issue 2 - 2020

Lokesh Rana,<sup>1</sup> Dinesh Sood,<sup>2</sup> Narvir S Chauhan,<sup>3</sup> Pooja Gurnal,<sup>4</sup> Nishant Nayyar,<sup>5</sup> Deepak Singh<sup>6</sup>

<sup>1</sup>Assistant Professor, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, India

<sup>2</sup>Professor, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, India

<sup>3</sup>Associate Professor, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, India

<sup>4</sup>Senior Resident, Department of Anaesthesia, Rajendra Prasad Government Medical College, India

<sup>5</sup>Senior Resident, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, India

<sup>6</sup>Resident, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, India

**Correspondence:** Lokesh Rana, Assistant Professor, Department of Radio-diagnosis, Rajendra Prasad Government Medical College, Himachal Pradesh, India, Email poolokesh2007@gmail.com

Received: June 07, 2020 | Published: June 23, 2020

## Introduction

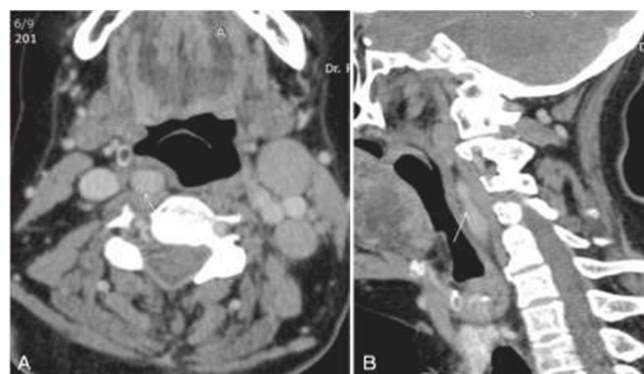
Aberrant course of ICA is important manifestation and it impose great threat to surgical intervention beside presenting as sub-mucousal mass and confusing physical examination of patient. Medial course, ectasia and tortuosity are frequent findings encountered in aberrancy of ICA. Though patient is asymptomatic mostly, but may present as pulsating mass, sensation of foreign body in the throat and hoarseness.<sup>3,4</sup>

## Case report

A 23 year old patient who is known case of Non-Hodgkins lymphoma on chemotherapy presenting with swelling on both sides of neck and there was a pulsating mass seen on left side in. The CECT scan of the patient was done and it showed (Figure 1 A&B) posterior pharyngeal wall bulging a on right side (white arrow) with aberrant course of right ICA which shows medialisation. Note was also made of enlarged lymph nodes at station IIa and IIb on left side cervical regions. Diagnosis of medialisation of ICA on right side was made besides patient a known case of Non-Hodgkins lymphoma (Figure 1).

## Discussion

Aberrant course of ICA is important manifestation and it impose great threat to surgical intervention beside presenting as sub-mucousal mass and confusing physical examination. Medial course, ectasia and tortuosity are frequent findings encountered in aberrancy of ICA. Though patient is asymptomatic mostly, but may present as pulsating mass, sensation of foreign body in the throat and hoarseness.<sup>5,6</sup>



**Figure 1** Known case of Hodgkin lymphoma a 23 year old female patient shows incidental finding of bulge in the posterior oropharyngeal wall clinically and CECT (Figure A & B) shows posterior pharyngeal wall bulging a on right side (white arrow) with aberrant course of right ICA which shows medialisation. Note is made of enlarged lymph nodes at station IIa and IIb on left side cervical regions.

Key radiological diagnostic features are:

- Trajectory course of ICA
- Bulge caused in the posterior Pharyngeal wall
- Retropharyngeal location of ICA

Other Spectrum of Aberrancy is: Medialisation, Tortuosity, Ectasia and Elongation.

## Acknowledgments

None.

## Conflicts of interest

Authors declare that there are no conflicts of interest.

## References

1. Muñoz A, De Vergas J, Crespo J. Imaging and clinical findings in patients with aberrant course of the cervical internal carotid arteries. *The open neuroimaging journal*.2010;4:174–181.
2. Gupta A, Shah AD, Zhang Z, et al. Variability in the position of the retropharyngeal internal carotid artery. *The Laryngoscope*. 2013;123(2):401–403.
3. Silbergleit R, Quint DJ, Mehta BA, et al. The persistent stapedia artery. *AJNR Am J Neuroradiol*. 2000;21:572–577.
4. Govaerts PJ, Marquet TF, Cremers CWRJ, et al. Persistent stapedia artery: does it prevent successful surgery? *Ann OtolRhinolLaryngol*. 1993;102(9):724–728.
5. Lasjaunias P, Berenstein A, TerBrugge KG. Clinical Vascular Anatomy and Variations. *Surgical Neuroangiography*. 2001;
6. Lapayowker MS, Liebman EP, Ronis ML, et al. Presentation of the internal carotid artery as a tumor of the middle ear. *Radiology*. 1971;98(2):293–297.