

## CASE REPORT

# Retropharyngeal Course of Right Internal Carotid Artery

<sup>1</sup>Manphool Singhal, <sup>2</sup>Nidhi Prabhakar, <sup>3</sup>Manoj Kumar Rohit, <sup>4</sup>Niranjan Khandelwal

## ABSTRACT

A case of retropharyngeal course of right internal carotid artery diagnosed on CT angiography is presented along with its clinical relevance.

**Keywords:** Retropharyngeal course, Right internal carotid artery, CT angiography.

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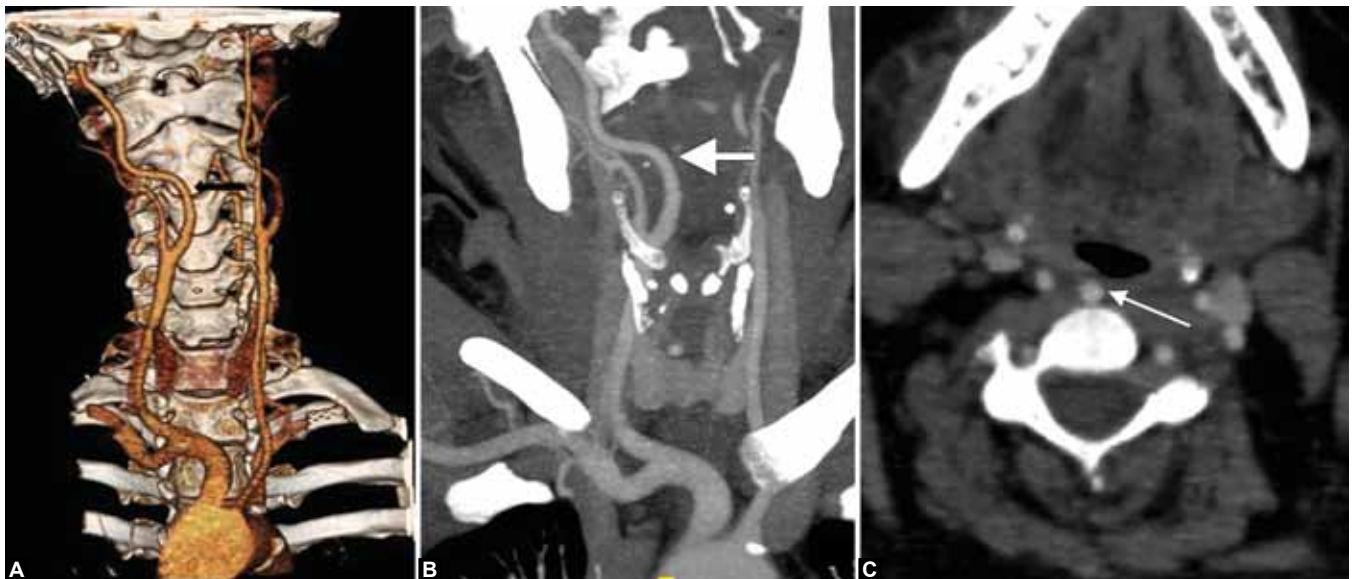
**Conflict of interest:** None

## INTRODUCTION

A 56-year-old woman, a follow-up case of Takayasu's arteritis, underwent CT angiography for evaluation

of stents in B/L subclavian arteries and carotids. Incidentally finding of medial deviation of right ICA in retropharyngeal soft tissue of neck was noted, causing a bulge in the posterior pharyngeal wall (Figs 1A to C).

Anatomic variation of ICA may vary from mild kinking to complete circular loop formation.<sup>1,2</sup> This variation is found in 0.2% of population<sup>3</sup> and may be asymptomatic or may present as bulging mass with smooth surface. This pulsating bulging mass may be confused with retropharyngeal enlarged lymph node, edema, neoplasm or abscess.<sup>4</sup> Unknowingly, any attempted needle aspiration or drainage of this mass may lead to catastrophic consequences. This variation may also lead to a high-risk of complications if it is not recognized especially before any pharyngeal surgery like tonsillectomy or drainage of peritonsillar abscess



**Figs 1A to C:** Reconstructed volume rendered (A) and maximum intensity projection (B) images show medial deviation of right internal carotid artery (thick arrows). Axial (C) image shows retropharyngeal location of right internal carotid artery (thin arrow)

<sup>1</sup>Senior Resident, <sup>2</sup>Additional Professor, <sup>3</sup>Professor  
<sup>4</sup>Assistant Professor

<sup>1,3,4</sup>Department of Radiodiagnosis, Postgraduate Institute of Medical Education and Research, Chandigarh, India

<sup>2</sup>Department of Cardiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

**Corresponding Author:** Manphool Singhal, Senior Resident Department of Radiodiagnosis, Postgraduate Institute of Medical Education and Research, Chandigarh, India, e-mail: drmsinghal@yahoo.com

which may result in massive hemorrhage.<sup>5</sup> Contrast enhanced multislice CT is the modality of choice as it simultaneously offers CT angiography and clear multiplanar images which allow thorough visualization of this vascular anomaly and its anatomical relationship, which is particularly important for preoperative planning for any pharyngeal surgical procedure.

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