Radiology Section

Saccular Aortic Aneurysm Causing Hoarseness: An Alarming Bell..!

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A 52-years-old male, known hypertensive and dyslipidemic, presented to the outpatient department with complaint of hoarseness for 10 days which was sudden in onset and non-progressive. He had no significant recent or past history. Clinical examination was normal. Fiberoptic laryngoscopy revealed left vocal cord palsy. Contrast-enhanced computed tomography (CECT) of neck revealed dilatation of left laryngeal ventricle (Arrow, [Table/Fig-1a-c]). CECT chest revealed presence of a partially thrombosed saccular aneurysm arising from distal aortic arch and protruding anteriorly and inferolaterally (Arrow, [Table/Fig-1b&d]). In absence of other identifiable cause, the left vocal cord palsy was suspected to be due to compression of the left recurrent laryngeal nerve at its origin from vagus nerve due to protruding aortic aneurysm. Patient was advised for surgery. But, he refused and died after three months.

Vocal cord paralysis due to saccular aneurysm of aorta compressing left recurrent laryngeal nerve (LRN) is rare clinical event and is observed in 5% of cases [1]. LRN is prone for compression at its origin from vagus nerve and around ligamentum arteriosum in aortopulmonary window. Sudden onset hoarseness (aorto-vocal syndrome) in a patient of aortic aneurysm indicates either sudden dilatation or rupture of aneurysm. Some authors have reported it as a prodrome of aortic rupture and advised for early surgery [2,3]. Aneurysm rupture can be avoided if surgery is performed within one month to one year of LRN palsy [4,5]. In conclusion, sudden onset of hoarseness in a patient of thoracic saccular aortic aneurysm should be an alarming bell and therefore needs immediate attention.

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[Table/Fig-1a-d]: CT neck showing dilatation of left laryngeal ventricle (Arrow, Panel A). Axial (Arrow, Panel B), oblique sagittal reformats (Panel C) and threedimensional VR image (Arrow, Panel D) of CT chest showing partially-thrombosed thoracic aortic saccular aneurysm arising distal to the origin of left subclavian artery and protrucing anteriorly and inferolaterally. (CT, Computed tomography; VR, Volume rendered)

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