Published online February 2nd, 2009 © http://www.iiav.org



Comment on the article "A three branches aortic arch variant with a bi-carotid trunk and a retro-esophageal right subclavian artery"

Satheesha NAYAK B.+

Department of Anatomy, Melaka Manipal Medical College (Manipal Campus) Manipal, INDIA.



 Satheesha Nayak B., MSc. PhD.
Associate Professor of Anatomy Melaka Manipal Medical College (Manipal Campus) International Centre for Health Sciences Madhav Nagar, Manipal Udupi District, Karnataka State, 578 104, INDIA.
+01 820 2922519
+01 820 2571005
nayaksathish@yahoo.com

Received January 23rd, 2009; accepted February 1st, 2009

Dear Editor, International Journal of Anatomical Variations:

I read the article entitled "A three branches aortic arch variant with a bi-carotid trunk and a retro-esophageal right subclavian artery" by Mligiliche and Isaac [1]. The article is well written and the embryological and clinical importances have been well discussed. I would like to congratulate the authors for the good work.

The most common embryologic abnormality of the arch of aorta is an aberrant right subclavian artery, which occurs in 0.5% to 1.8% of the population. [2, 3]. I have seen a similar case of aberrant right subclavian artery passing behind the esophagus, only once in the past 15 years. That case was found in an aborted fetus. Although most cases of this anomaly are asymptomatic, symptoms may appear when a "vascular ring" completely encircles the trachea or the esophagus. Extrinsic compression of the esophagus may lead to dysphagia. This phenomenon of dysphagia due to compression of esophagus by right subclavian artery was first reported in 1794 by London physician David Bayford. It was originally described as "dysphagia by freak of nature," and is commonly referred to as "dysphagia lusoria" [4]. The extrinsic compression of the esophagus can be identified radiologically and can be treated surgically [5]. It is quite interesting to note that this anomaly remained asymptomatic for 100 years in spite of the large size of the abnormal right subclavian artery. © IJAV. 2009; 2: 23.

References

- [1] Migiliche NL, Isaac ND. A three branches aortic arch variant with a bi-carotid trunk and a retro-esophageal right subclavian artery. International Journal of Anatomical Variations. 2009; 2: 11–14.
- [2] Richardson JV, Doty DB, Rossi NP, Ehrenhaft JL. Operation for aortic arch anomalies. Ann Thorac Surg. 1981; 31: 426–432.
- [3] Stewart JR, Kincaid OW, Edwards JE. An atlas of vascular rings and related malformations of the aortic arch system. Springlield (IL): Charles C. Thomas. 1964; 53.
- [4] Bayford D. An account of a singular case of obstructed deglutition. Memoirs Med Soc London. 1794; 2: 275–86.
- [5] Carrizo GJ, Marjani MA. Dysphagia lusoria caused by an aberrant right subclavian artery. Tex Heart Inst J. 2004; 31: 168–71.