Kommerell's Diverticulum with Aberrant Left Subclavian Artery: Original Image

Aberan Sol Subklaviyan Arter ve Kommerel Divertikülü Birlikteliği

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Copyright © 2013 by Ulusal Vasküler Cerrahi Derneği ommerell's diverticulum is a rare condition, involving the left fourth aortic arch and the anomalous origin of the left subclavian artery (0.5%-2%). It is usually asymptomatic and is most often an incidental finding.¹ In symptomatic patients, symptoms usually arise from compression of trachea and esophagus.^{1,2} We report an original image of computerized tomography scan of Kommerell's diverticulum with aberrant left subclavian artery.

CASE REPORT

A 21-year-old male who had symptoms such as chest pain, dyspnea and dysphagia, presented to our department due to worsening of his symptoms. There were no signs of ischemia on electrocardiography or abnormal findings on echocardiography. Three dimensional computerized tomography scans performed, and Kommerell's Diverticulum with aber-

rant left subclavian artery was found (Figure 1-3). Despite his dyspnea and dysphagia symptoms, there was no significant esophageal or tracheal compression on computerized tomography due to diverticula, and surgical treatment was not preferred.

DISCUSSION

Kommerell's diverticulum is an anomaly of aortic arch system, but does not always cause symptoms such as dysphagia or dyspnea.² In this



FIGURE 1: Anterior view of Kommerell's diverticulum and aberrant left subclavian artery

Damar Ger Derg 2013;22(1)



FIGURE 2: Posterior view of Kommerell's diverticulum and aberrant left subclavian artery.



FIGURE 3: Posterosuperior view of Kommerell's diverticulum and aberrant left subclavian artery.

anomaly, left subclavian artery arises from a diverticulum at the junction of the aortic arch.³ The diverticulum is generally well developed, because the fetal ductus arteriousus, at the origin of the aberrant left subclavian artery, carries a large volume of blood.^{2,3} The echocardiography is not suitable for this anomaly in many cases and cannot help for definitive diagnosis. Computerized tomography angiography, magnetic resonance angiography or invasive classic angiography are the gold standard

diagnostic tools, as we have used in our case. It is usually asymptomatic, and surgical approaches can be suitable for symptomatic patients. The main surgical technique involves lateral thoracotomy and exision of diverticula.^{2,3}

Conflict of Interest

Authors declared no conflict of interest or financial support.

REFERENCES

- Backer CL, Hillman N, Mavroudis C, Holinger LD. Resection of Kommerell's diverticulum and left subclavian artery transfer for recurrent symptoms after vascular ring division. Eur J Cardiothorac Surg 2002;22(1):64-9.
- 2. Van Son JAM, Konstantinov IE, Burckhard F. Kommerell and Kommerel diverticulum. Texas Heart Inst J 2002;29(2):109-12.
- 3. Van Son JA, Julsrud PR, Hagler DJ, Sim EK, Pairolero PC, Puga FJ, et al. Surgical treatment of vascular rings: The Mayo Clinic experience. Mayo Clin Proc 1993;68(11):1056-63.

154 Damar Cer Derg 2013;22(1)