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LETTER TO THE EDITOR

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Dealing with Kommerell's diverticulum: A rare anomaly with multiple surgical options

To the Editor,

Kommerell's diverticulum (KD) is characterized in the most frequent form by an aneurysmal dilatation at the origin of an aberrant right subclavian artery (ARSA) associated to a left-sided aortic arch, while the presence of a right-sided arch is observed only in approximately 0.01% of radiological series.[1] This anomaly was first described by Burckhard F. Kommerell, a German radiologist, in 1936.[2] Interestingly, the first finding of an anomalous subclavian artery is due to David Bayford in anatomical specimens as early as 1735[3]; he also described the clinical features, reporting a fatal case of "obstructed deglutition" caused by an ARSA compressing the esophagus, coining the term "disphagia lusoria," latin words meaning that this malformation was due to a freak (lusus) of nature.[3]

The article by Marchenko et al. published in the *Journal of Cardiac Surgery*,[4] which we have read with great interest, describes the correction of this anomaly by debranching of epiaortic vessels with stent graft insertion in the aortic arch and descending thoracic aorta. In this case, beautifully illustrated, the surgical strategy was most likely also dictated by the presence of an aneurysm of the arch concavity. In any case, the authors have stressed that this new technique could significantly reduce cardiopulmonary bypass and ischemic times. We have recently proposed an alternative strategy, repairing a similar case of KD with ARSA and a bovine aortic arch using a single-stage hybrid approach, achieved by total aortic arch replacement using a composite frozen elephant trunk prosthesis and endovascular treatment of the ARSA.[5] Also this procedure may represent an interesting alternative for managing patients with KD associated with aortic arch aneurysm and anomalies of the brachiocephalic vessels.

Although almost 90 years have elapsed since its first description, at present, a definite agreement on the best surgical treatment of KD has not yet been found. The variety of techniques used mostly depends on the rarity of the disease and on possible associated anomalies requiring individually tailored approaches; therefore, new technical proposals may be expected in the future.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

Igor Vendramin MD
Uberto Bortolotti MD
Ugolino Livi MD

Cardiothoracic Department, University Hospital, Udine, Italy

Correspondence
Uberto Bortolotti, MD, Cardiothoracic Department, University Hospital, P. le S.M. Misericordia 15, Udine, Italy.
Email: uberto48@gmail.com

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