Anomalous Origin of Left Pulmonary Artery From Ascending Aorta: Embryological Model

Bin Li[1], Aijun Liu[1], Ming Yang[1], and Junwu Su[1]

[1]Capital Medical University Affiliated Anzhen Hospital

October 16, 2021

Abstract

Background Anomalous origin of the left pulmonary artery (ALPA) from the ascending aorta (AA) is a rare congenital heart malformation. **Aim** To give some of our embryological considerations of ALPA from the AA. **Methods** We present a patient with ALPA from the AA, right-sided aortic arch, right-sided ductus arteriosus (DA), and aberrant left subclavian artery (LSCA). **Results** The distal end of ALPA was cut off, the proximal end was sutured, and the distal end was directly anastomosed to the left wall of the main pulmonary artery (MPA). **Conclusion** The failure of migration and differentiation of cardiac neural crest cells at the fourth and sixth archs result in unilateral arch agenesis or failure of detachment of the left sixth arch from the aortic sac, which form ALPA the AA.

Hosted file

`Manuscript.doc` available at https://authorea.com/users/374181/articles/541912-anomalous-origin-of-left-pulmonary-artery-from-ascending-aorta-embryological-model