Extraordinary branching pattern of the aortic arch

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A CT-scan of a 75-year-old patient showed an aneurysm of the descending aorta with a maximum diameter of 4.8 cm involving the left subclavian artery. Due to the fact that the patient had several comorbidities including a severe chronic obstructive pulmonary disease he was treated only conservatively. However, there were several interesting findings on the CT-scan: the branching pattern of the aortic arch revealed a left carotid artery arising as first side branch of the distal part of the ascending aorta. This vessel crosses the midline right in front of the trachea. Apart from that the patient did not have a brachiocephalic trunk: the right carotid artery arose as the first branch from the aortic arch and crossed the right subclavian artery anteriorly. Furthermore, the left subclavian seemed to arise from the descending aorta and not from the aortic arch.