The patient is 72 years old with a past medical history of atherosclerotic coronary disease and coronary artery bypass grafting with left internal mammary artery (LIMA) to the left anterior descending (LAD) presented with chest pain. Coronary angiography was pursued to elucidate the etiology of the patient’s symptoms. This revealed an angiographically patent right internal mammary artery. The LIMA graft to the LAD was unable to be selected for angiography at the expected proximal third of the subclavian artery (Figure 1A). Further angiography performed of distal segments of subclavian artery (Figure 1B). This was followed by selective thyrocervical trunk angiography (Figure 1C). This revealed an anomalous origin of the LIMA, which was anastomosed to the mid LAD (Figure 1D) and appeared to arise from the thyrocervical trunk.

Anatomically, the subclavian artery is divided into three segments. From the cadaver study by Henriquez-Pino and Prates,1) it was determined that the LIMA arises from the first segment of the subclavian artery in 92% of subjects. LIMA was found to arise from the second portion of the subclavian in 7% and from the third segment in 1%. Two reports described a LIMA takeoff directly from the aortic arch.2)3) A case study described a dual anomalous origin of the LIMA off the thyrocervical trunk which arises from the third segment of the subclavian artery.4) To our knowledge, there has been only one additional case describing a LIMA takeoff from the thyrocervical trunk arising from the aortic arch.5)
SUPPLEMENTARY MATERIAL

Movie 1
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REFERENCES


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Figure 1. (A) Left subclavian artery angiography. (B) Distal left subclavian and axillary angiography. (C) Engagement of TCT with aortic arch origin. LIMA takeoff from TCT. (D) LIMA anastomosis to mid LAD. LAD: left anterior descending, LIMA: left internal mammary artery, TCT: thyrocervical trunk.